

CHEMISTAND DRUGGIST

For Retailer, Wholesaler and Manufacturer

AUGUST 11 1956



SMITH EDINBURGH

CODEINE

Codeine Phosphate B.P. "Special"—Smith, has a specification which makes it of interest to tablet manufacturers.

ETHYLMORPHINE

Ethylmorphine Hydrochloride B.P.C. — white, micro-crystalline, odourless powder.

MALE FERN

Extract of Male Fern B.P.—specially prepared for the manufacture of capsules of male fern.

PILOCARPINE

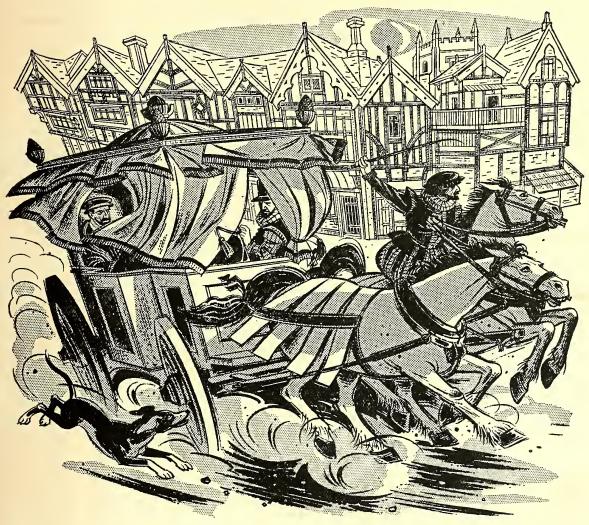
Alkaloid, Hydrochloride, Hydrobromide, Nitrate—to official specifications where applicable.

SANTONIN

Colourless, odourless, white crystalline powder; available in packs $\frac{1}{8}$ oz. upwards; prices on request.



T. & H. SMITH LTD., BLANDFIELD CHEMICAL WORKS, EDINBURGH II



ASTHMA IN EDINBURGH

When the great Cardan of Milan was called to the Edinburgh of Mary Queen of Scots to treat the Archbishop of St. Andrews for "the disease the Greeks called asthma", the last part of his journey north from London took 23 days.

Today's patient does not have to wait for treatment. An injection of Adrenaline, a dose of Ephedrine or, best of all, Isoprenaline by oral inhalation or sublingual administration brings immediate relief. Adrenaline, Ephedrine and Isoprenaline are three of the fine chemicals available from Burroughs Wellcome & Co. in large or small quantities and at strictly competitive prices.

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BURROUGHS WELLCOME & CO. (THE WELLCOME FOUNDATION LTD.) LONDON [SOCIETE HOUSES: NEW YORK · MONTREAL · SYDNEY · CAPE TOWN · BOMBAY · BUENOS AIRES · CAIRO · DUBLIN · AUCKLAND

LANCÔME

announce two new colours ROSE BLEU

(Rose Blue)

The Pale Blue-Pink Lipstick with the white light in it!

ROSE BLEU gives mystery and fascination to every movement of the lips.

Undoubtedly, it is the spark of genius amongst the talented range of Lancôme Lipsticks.

Rose Bleu is unique

ROSE BLANC

(Rose White)

ROSE BLANC—the heart of a pink rose floodlit by white moonlight.

ROSE BLANC is the reigning snow pink princess amongst the Lancôme pinks.

Refills, nail varnish (plain) and cream rouge to match both lipsticks.

ROSE BLEU ROSE BLANC

The two latest Lancôme triumphs

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14 Grosvenor Street, London, W.I.

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These products are being specially detailed by all our representatives and extensively advertised in all the medical journals.

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for rapid relief in dyspepsia, hyperchlorhydria and peptic ulcer.

EACH TABLET CONTAINS

ALUMINIUM HYDROXIDE gr. 5

PHENOBARBITONE gr. 1/4

ATROPINE SULPHATE gr. 1/500

Presented in cartons of 24 2/3 each cartons of 100 5/- ,, alcons of 500 17/3 ,,

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preparation to reduce the risk of post-partum haemorrhage.

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330 I.U. WITH
INJ. ERGOMETRINE MALEATE.
B.P., 0.5 mg.

Presented in dual packs containing
1 vial of each component 3/4 each
and in boxes containing
six vials of each component 18/6 ,,

NOBECUTANE-

the sterile plastic spray-dressing. An effective replacement for conventional dressings.

NOW IN 100 ml.
SPRAY PACK FOR THE
GENERAL PRACTITIONER.

TRADE PRICE
Presented in spray containers of 100 ml. 15/6 each
and 300 ml. 24/- ,,
bottles of 50 ml. 7/4 ,,

RONDASE— the spreading factor.

AN AID TO LOCAL ANAESTHESIA.

Presented in R.C.B. containing 1000 i.u.

Hyaluronidase Evans

TRADE PRICE

Boxes of 6 R.C.B. 14/- each

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EVANS MEDICAL SUPPLIES LIMITED

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Agents in Glasgow: The New Apothecaries Co. Ltd.

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'Zo' AND 'ZONAS' RIGID ADHESIVE PLASTERS
'ELASTIKON' ELASTIC ADHESIVE PLASTERS B.P.C.

Essential for first-aid and for strapping, support, and general orthopaedic use. Wound on metal spools with metal sleeves in a complete range of widths and lengths.

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Johnson and Johnson products are supported by continuous press advertising and outstanding point-of-sale material. This—and their unequalled reputation for quality—makes them one of the fastest selling and most profitable groups you can handle.



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Round neat balls of B.P.C. Cotton Wool of standard size and density. Packed in an attractive 'Window' Display Carton.

COTTON BUDS

Soft, safe buds of cotton wool, on doubleended white wood sticks. Perfect for the nursery tray and for spot application of medicaments.

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The World's Most Trusted Name in Surgical Dressings

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is particularly appropriate for the treatment of Dry or Squamous Dermatosis Psoriasis · Lichen Planus

Epidermidomycosis Epidermidophyton Tropical Tinea.

CONSTITUENTS: Dioxyanthranol, Ichthammol, Salicylic Acid, Resorcin, Balsam Peru, Ol. Rusci, in Paraffin, Molle base.

PRICE TO YOU:

40 gm. Tube 32/11 per doz. incl. P.T. Retailing at 3/6 per tube.

1 lb. Dispensing Pack . . . 15/- each

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EMOLLIENT CREAM

may now be obtained in 70 Gramme Tubes which replace the 2oz. jars.

PACKINGS and PRICES

40 gm, tube (Unperfumed) Retail 1/10; Per Doz. 13/-; P.T. 3/10

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Retail 2/6; Per Doz. 13/-;
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Retail 2/10; Per Doz. 20/6;
P.T. 6/70 gm. tube (Perfumed)
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P.T. 18/(Unperfumed)

1-lb. jars (Unperfumed) 12/- each; P.T. 3/7.

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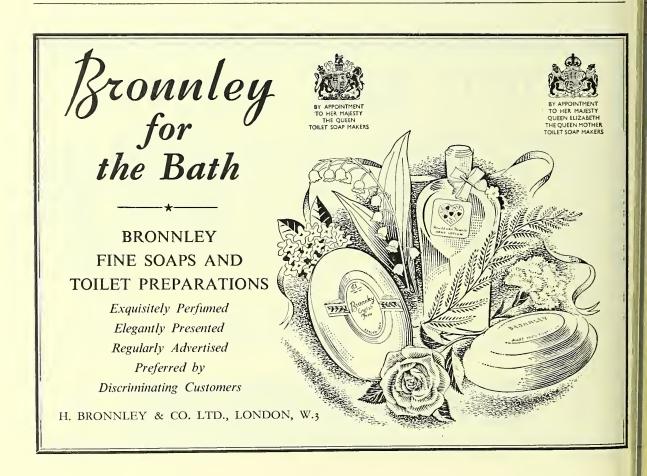


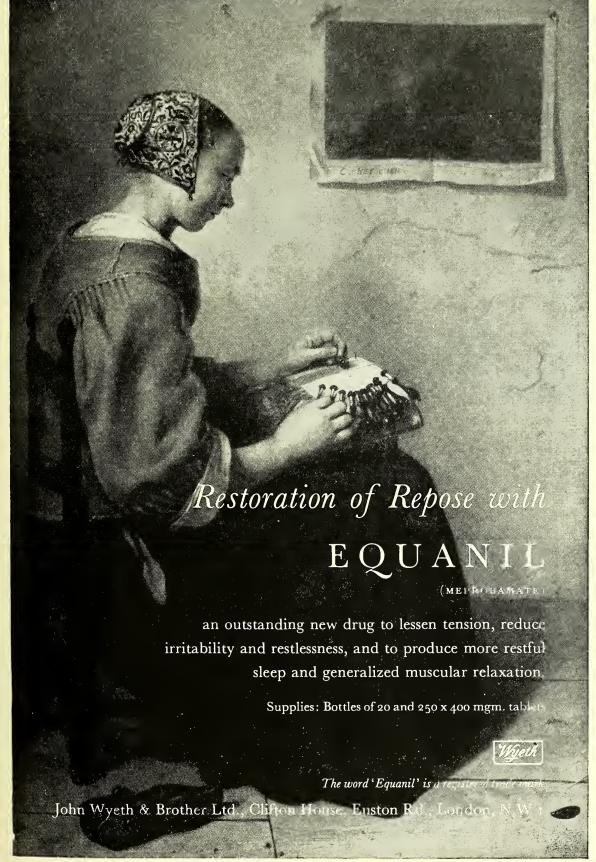


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Orange flavoured CHILDREN'S ASPIRIN **TABLETS**

A dependable product you can recommend with confidence. Packed in 10 attractive styles.

Delightful display material available on request.



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Swiss precision cine equipment

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The most remarkable tranquillizer yet discovered

Now made available in Great Britain by Lederle

MILTOWN, 2 methyl-2-n-propyl-1, 3-propanediol dicarbamate, is a new, safe, powerful tranquillizer that has a selective action in anxiety and tension states. It possesses valuable sedative, hypnotic and muscle-relaxing properties and has the following important advantages:—

It is non-toxic and has negligible side effects

Relaxes the patient for natural sleep without narcosis

Is a muscle relaxant in spasm, pain and stiffness

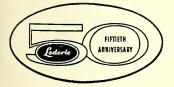
Has proved effective where other tranquillizers have failed

Is easily tolerated

Fully active by mouth ... relieves stress ... stabilises the emotions

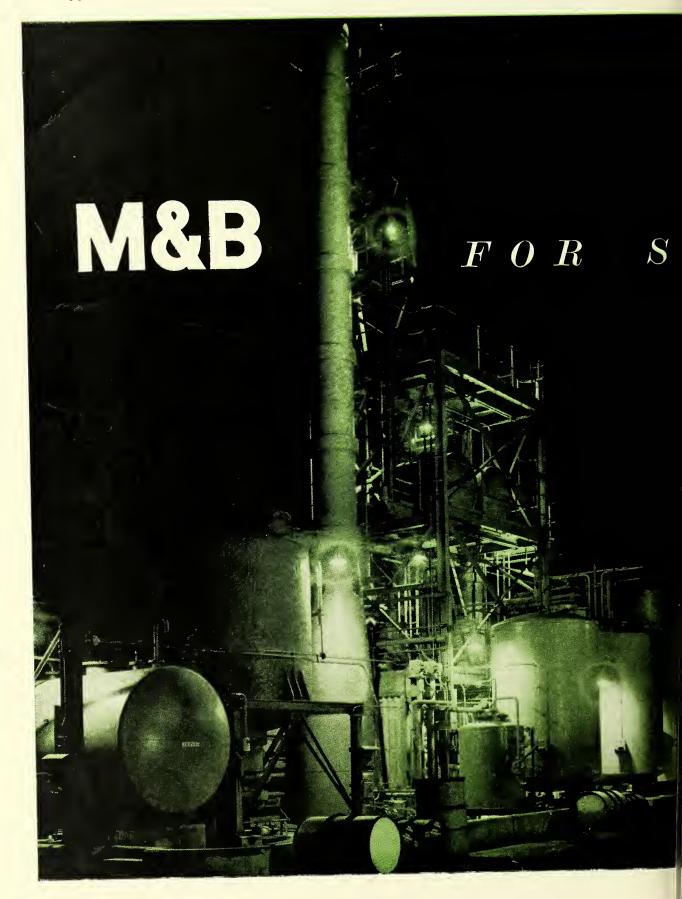
In tablets of 400 mg. for oral use. Bottles of 50.

* Trade-mark



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Since before the war, when the first successes of our research into the therapeutic properties of sulphanilamide derivatives became known, the house mark M&B has come to be closely linked with this field of investigation and manufacture. Research has continued. Expansion has gone on. Today we *remain* the house for sulphonamides, with plant producing a wide and important range of these drugs to meet every demand.

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is the only machine with these outstanding features:-Delivered completely assembled. No special foundations required. Complete accessibility. One operator. Choice of two speeds. Efficient filtration. Mechanical simplicity. Foolproof operation. Adaptable for all types of containers. Can be supplied for steam or circulating boiler heating or alternatively complete with in-built gas-fired heat injectors.

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... the ONLY Chemists only toothbrush

made in nylon or bristle . . . long or short head . . . medium or hard.

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on orders of 4 doz. or more placed up to the end of SEPTEMBER.

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DISPLAY MAW'S, THE TOOTHBRUSH YOU CHOOSE TO SELL . . .

Available in one, two or four dozen eye-catching display packs.

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Sell her this new BRIGHT idea!

NOW IS THE TIME TO DISPLAY
HOUSEWARE MADE FROM...



MADE FROM

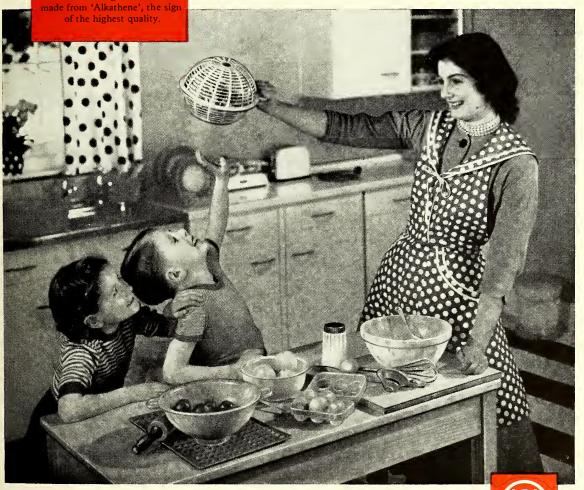
POLYTHENE

Articles bearing this label are

You can sell any amount of goods made from 'Alkathene'
—THE original polythene discovered by I.C.I.

'Alkathene' houseware is in the public eye just now. Full page colour advertisements in national women's magazines make it easy to sell. The full weight of this advertising is behind your sales drive. Striking and attractive display material is available on application, from your normal suppliers. Why not organize your own 'Alkathene' Week with special window and interior displays? Your customers will recognise the 'Alkathene' label which appears in every advertisement. They will ask for 'Alkathene'.

I.C.I. do not themselves manufacture houseware from 'Alkathene'. All enquiries for individual articles should be addressed to the manufacturers through the usual trade channels.



IMPERIAL CHEMICAL INDUSTRIES LIMITED · LONDON · S.W.1

'Alkathene' is the registered trade mark for the polythene made by I.C.I.

AH10/T/I

NOW-the Mass



The 'FOUR-MOST'—a dual voltage model complete in a real hide, zip fitted case—is the result of eighteen months research into the real needs of the millions of young men in this country who are now turning to the modern way of effortless shaving.

Backed by powerful REMINGTON publicity, the 'FOUR-MOST' will find a vast waiting market. It means that every one of these young men in your locality is an interested potential customer.

REMINGTON - the nai

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With the NEW

REMINGTON MONTH

DUAL VOLTAGEREMINGTON FOR ONLY £6.19.6

(INC. P. TAX)

-OR 15/- DEPOSIT!

plendid performance—Splendid value—Splendid esentation — will inevitably make the new EMINGTON 'FOUR-MOST' the outstanding ider in the lower price market. 17,500,000 men of aving age in the British Isles—all potential stomers who already know that the name EMINGTON' means the finest electric shavers tainable.

E 'FOUR-MOST' WILL BE LAUNCHED HEAVY NATIONAL PUBLICITY!

unched with over 33,000,000 hard-selling advertments in September alone. It will be kept solidly on sales-winning course from then on by sustained I extensive promotion every month.

EE 'FOUR-MOST' DISPLAY STANDS, OWCARDS, LEAFLETS!

he high quality standard of Remington material

are available on request to direct the certain demand to *your* store and link-up with the powerful national advertising campaign.

TWO-THIRDS RE-IMBURSEMENT OF YOUR OWN 'FOUR-MOST' ADVERTISING!

will be made by Remington during September and October 1956 where the special FREE stereos available are used in your local press: 50% any time after this special launching offer.

EASY TERMS

ON THE 'FOUR-MOST'!

The simple and attractive REMINGTON Easy Terms plan will add tremendous weight to the popularity of this top-quality, low-priced new model. Your customer pays a deposit of only 15/-, has immediate possession of the shaver — you have NO accounting worries or queries.

THE CUSTOMERS WILL BE READY - WILL YOU?

ou haven't received your copy of the mailing, which gives full details of the 'FOUR-MOST' introduction write to:

Promotion Dept, Shaver Division, Remington Rand Ltd, 26-40 Kensington High Street, London W8 ('Phone: WESTERN 8241)

t makes all the difference!

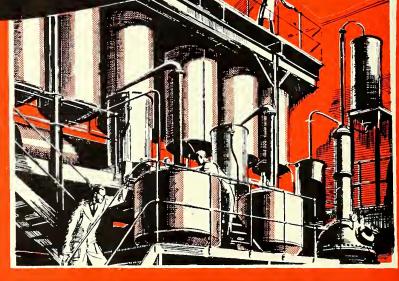
A natural raw material SERVICE EXTRACTION SERVICE aqueous and solvent

Many product formulæ contain extracts of natural products, such as drug, herb or spice extract, but, unless tonnage is really large, it is seldom

economic to install special extraction plant for individual lines.

We have been extracting a very wide range of raw materials for nearly a century and have available a large and comprehensive plant, together with great experience in this work. In addition to extracting and marketing our own range of high quality drug and other extracts, we undertake the extraction of customers' materials to their own specification. Thus we can place at your disposal a suitable plant for extracting your materials—whether by the hundredweight or ton.

WE OFFER YOU OUR
EXTRACTS AND
OUR EXTRACTION
SERVICE, FULL PARTICULARS OF WHICH
WILL GLADLY BE
GIVEN ON HEARING
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NATURAL RAW MATERIAL

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will be pleased to welcome you at any of their Christmas Showrooms at-

Bristol Royal Hotel, Room 1: Mr. G. L. Taylor, Mr. L. T. Smith, 20 Aug.—24 Aug.

Leeds Gt. Northern Hotel, Rooms 20 & 21: Mr. J. L. Dodd, Mr. C. R. Shute, 27 Aug.—31 Aug.; Mr. K. S. Robertson-Gow, 3 Sept.—7 Sept.

Belfast Queen's Buildings, 10 Royal Avenue: Mr. H. B. Montgomery, 27 Aug. - 31 Aug., 3 Sept. - 7 Sept.

Southampton Polygon Hotel, Rose Lounge: Mr. G. L. Taylor, Mr. D. N. Wilson, 28 Aug.—30 Aug.

Liverpool Adelphi Hotel, Suite 317: Mr. A. Wolfenden, Mr. W. J. Lewis, Mr. K. E. Michael, 3 Sept. – 7 Sept.

Nottingham County Hotel, Regency Room: Mr. E. C. Snape, Mr. A. R. Black, 3 Sept. – 7 Sept.

Glasgow St. Enoch Hotel, Room 218: Mr. K. S. Robertson-Gow, Mr. H. Wilson, 3 Sept. – 7 Sept.; Mr. D. N. Wilson, 10 Sept. – 14 Sept.

Birmingham Grand Hotel, Windsor Room: Mr. K. E. Michael, Mr. S. C. Stone, 10 Sept. – 14 Sept.; Mr. G. L. Taylor, 17 Sept. – 21 Sept.

Edinburgh North British Hotel, Room 101: Mr. H. Wilson, Mr. F. S. Garrood, 10 Sept.—14 Sept.

Newcastle Royal Turks Head Hotel, Planet Room: Mr. D. Black, Mr. G. T. Musson, 10 Sept.—14 Sept.

Manchester Queen's Hotel, Queen Room: Mr. C. R. Shute, Mr. A. Wolfenden, Mr. W. J. Lewis, 10 Sept.—14 Sept.

Grimsby Yarborough Hotel, Lodge Room: Mr. E. C. Snape, 11 Sept.—13 Sept.

Cardiff Royal Hotel, Room 40: Mr. W. J. Lewis, Mr. L. T. Smith, 17 Sept.—21 Sept.

Hull Royal Station Hotel, Room 133: Mr. J. L. Dodd, Mr. E. C. Snape, 18 Sept. – 21 Sept.

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Heavy advertising in

'WOMAN'

'WOMAN'S OWN'

'DAILY MIRROR' etc.

will reach 15,000,000 WOMEN

-widening the market for this fast-selling wave-set

TRESS, already one of the biggest selling wave sets, will reach an even wider market with the addition of this half-size pack. Be sure you have stocks to meet an entirely new demand for 1/9d Tress.

The large size will still continue in demand by enthusiasts who have formed the habit of buying Tress at 2/10½d per bottle.

TRADE TERMS

SMALL SIZE
Price 8/10d
per dozen bottles
plus 90% tax
selling at 1/9d per bottle.
LARGE SIZE
Price 14/5d
per dozen bottles
plus 90% tax
selling at 2/10½d per bottle

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Build up Goodwill with . .



Many Chemists are recommending 'ELASTO' to their customers with mutually good results.

P.A.T.A.

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Tweezers with new talking points! Women everywhere have given an enthusiastic welcome to the 'spring action' GREBA which grips the minutest hairs without effort or tension and makes eyebrow plucking simple and sure. Sales steadily soar. Order supplies of these British-made patented Stainless Steel Tweezers from your wholesaler now.

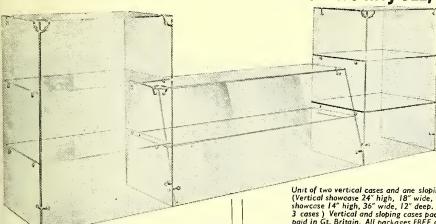
TRADE PRICE 18/- DOZ. (Plus P.T.)



CALMIC LIMITED

CREWE HALL . CREWE . CHESHIRE

It's crystal clear...
The more they SEE, the more they BUY



The beauty of a Martin glass display case is that it shows merchandise of every description to your customers' best advantage. Each individual case, with its gleaming chrome fittings, is tested and guaranteed before delivery. Choose a vertical or sloping showcase and build better business from the moment it is installed.

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Special orders to customers' own requirements carried out quickly. Quantity orders on application.

MARTIN'S GLASS DISPLAY CASES

LOOK INTO IT TODAY—EQUIP YOUR SHOP THE MODERN WAY! Send immediately for fully illustrated leaflet of Martin Display Cases and prices.

Name

Addres

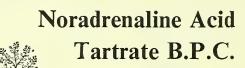
Post to: MARTIN DISPLAY (Dept. CD), 52 Market St., Watfard, Herts. Tel: Watford 9287

CARNEGIES OF WELWYN

Makers of Adrenaline and its homologues by synthesis

Adrenaline Acid Tartrate B.P.

Adrenaline B.P.



Isoprenaline Sulphate B.P.

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Telex: LONDON 8676





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THE VERY EASILY REMOVED LABEL, LEAVES ELEGANT PACKAGE BEARING NO PRINTING WHATSOEVER

> Supplies can be obtained through most wholesalers

Manufactured

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Laboratories of

RICHARD DANIEL & SON LTD.

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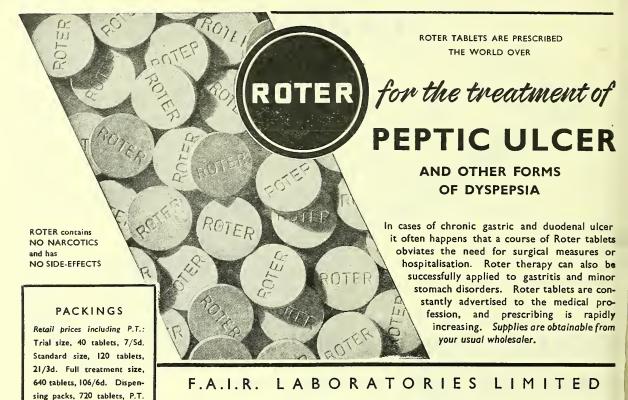
And at GROSVENOR STREET, ASHTON-U-LYNE. Tel: 2816 (3 lines)

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"Bayer Products Limited remind the trade that 'Fergon' is their registered trade mark and action will be taken against any person who infringes this trade mark or who supplies other goods when 'Fergon' is demanded."

BAYER PRODUCTS LIMITED

NEVILLE HOUSE . KINGSTON-ON-THAMES . SURREY



The shaving brush with the TWO Y

We cordiolly invite you, when in London, to visit our showrooms ot :-

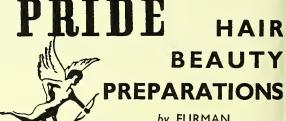
92 Regent Street, London, W.I (one minute from Piccodilly Circus) ond see our range of 250 Pure Bristle ond Pure Bodger Shoving Brushes to suit oll morkets



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In the new super spray. This fine, fast-selling product is an article you can recommend with confidence.
Price 20/- per dozen. P.T. 18/- per dozen. Retail 4/3d, REFILL Sachet 13/- per dozen. P.T. 11/8d, per doz. Retail 2/8d.

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THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

The weekly newspaper for pharmacy and all sections of the drug, pharmaceutical and fine chemical, cosmetic, and allied industries

Official organ of the Pharmaceutical Society of Ireland and the Pharmaceutical Society of Northern Ireland

Volume 166

August 11, 1956

No. 3990

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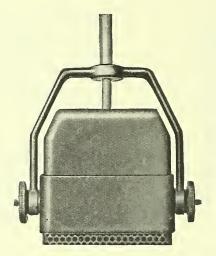
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And in between they hear the many reasons why they should buy the one and only Philips 'Philishave', the dry shaver with Rotary Action. But then, your customers are constantly being reminded of the 'Philishave'. On the radio. In the national papers and in magazines. On posters. At exhibitions. So that when they see it displayed in your shop the sales ground work has been very well covered. That's the moment when they decide to take advantage of that free trial offer they've heard about. But . . . well, do they see it in your shop? Do you make the 'free trial offer'? If not, opportunity is passing you by - often. After all, the 'Philishave' is the dry shaver with the biggest annual world sale, you know!



Volume 166

AUGUST 11, 1956

No. 3990

Restrictive Practices

FIRST ORDER UNDER THE ACT

THE President of the Board of Trade announced in a written reply in Parliament on August 2 that the Board has made the first Order (the Registration of Restrictive Trading Agreements Order, 1956) requiring registration of certain restrictive trading agreements.

The Order is made under the Restrictive Trade Practices Act, 1956, which received Royal Assent earlier in the day. The Minister explained that, if the Order receives the approval of Parliament, it will come into force on November 30. During the three months following that date, particulars of the classes of agreement specified in the Order must be furnished to the Registrar of Restrictive Trading Agreements. The specified classes of agreements are, broadly, those which include restrictions as to prices or other terms or conditions or which involve collective discrimination. They include agreements about common prices and conditions of sale, agreements about level or agreed tendering, agreements under which preferential terms are granted to certain persons or traders and agreements under which supplies of goods are confined to certain persons or traders. Agreements which contain restrictions affecting exports and which do not affect supply to the home market, do not have to be registered but must, under Section 31 of the Act, be notified to the Board of Trade.

It is not known how many agreements will fall to be registered. The decision not to register all agreements at this stage has been taken in order, as the Minister said in the House of Commons, "to give the Registrar . . . the best opportunity of getting his register in order and recording those things which deserve registration." It is understood that a number of pharmaceutical manufacturers have decided to terminate participating in existing price conventions and will, therefore, not be applying for registration. Under the provisions of the Act some restrictive trading agreements, as for example sole-agency, patent and trade-mark agreements are, in specified circumstances, exempted from registration. Printed copies of the Act may not be available for some time but the Restrictive Trade Practices Bill as amended on Third Reading in the House of Lords (Bill 172) contains the final text. The Order is available from H.M. Stationery Office, York House, Kingsway, London, W.C.2, from August 10.

MR. RUPERT LEIGH SICH has been appointed Registrar of Restrictive Trading Agreements, with the duties of pre-

paring, compiling and maintaining the register of restrictive trade agreements and for taking proceedings before the Restrictive Practices Court in respect of registered agreements. His office at Chancery House, Chancery Lane, London, W.C.2, opened on August 7.

Prescription Pricing

REALLOCATION OF AREAS

THE reallocation, by the Ministry of Health, of Executive Council areas to pricing offices has now been organised in accordance with the capacity of each office, and so that more complete data may be obtainable for periodical reports on doctors' prescribing. The announcement is made in a circular (ECL46) issued by the Ministry to Executive Councils on August 2. The circular notifies to each Executive Council the pricing office to which its

contractors should now forward prescription forms for pricing, and asks the Council to arrange for prescriptions dispensed in August and onwards to be surrendered to that office. A notice setting out the procedure is being sent to Executive Councils for distribution to contractors, together with new labels for affixing to the monthly bundles. Contractors in areas where arrangements for full pricing have been in force are being asked to revert to sorting into "S" and "A" bundles for August prescriptions.

Conference Papers

SUPPLY OF GALLEY PROOFS

GALLEY proofs of the science papers to be read at the British Pharmaceutical Conference meeting in Dublin in September will be available during the week beginning August 20. Galley proofs of the chairman's address and of the papers being presented at the symposium and professional sessions are already available. Conference members who wish to receive copies of the papers and have not already applied, should apply to the secretaries, 17 Bloomsbury Square, London, W.C.1, by August 18. The full programme of papers being presented at the Conference meeting was published in THE CHEMIST AND DRUGGIST, July 21, p. 56.



GLASGOW PHARMACISTS LOOK IN ON STERILE PROCESSING: Glasgow and district hospital pharmacists view the sterile area at the pharmaceutical processing and packaging plant of Pfizer, Ltd., Folkestone. Left to right: Miss M. Reid, Mr. A. Roxburgh, Miss A. Sproat, Miss E. Paul, and Mr. B. Skinner (of the company's staff).

Society's Awards

GRANTS FOR RESEARCH WORK

THE Pharmaceutical Society's Council has made the following awards for 1956-57: Wellcome Pharmaceutical Research Fellowships (value £400): Mr. Leonard Babb, Leeds (to continue in the department of pharmacology, Leeds University, research on the structureaction relationships amongst ethylenediamine derivatives); Mr. Jeffery N. Carrington, Dorking (to continue, in the School of Pharmacy, London University, research in pharmaceutical engineering science); Mr. Roy Fielden, Todmorden, Lancs (to undertake, in the department of pharmacology, Leeds University, research on the influence of nuclear substituted choline phenyl ethers on the sympathetic division of the autonomic nervous system). Pharmaceutical Society scholarships (value £350): Mr. William Boyle, Glasgow (to continue in the department of pharmacy, Royal Technical College, Glasgow, an investigation of the biochemistry of the lipopolysaccharides and lipo protein from the gram-negative bacteria); Mr. David Wright, Wanstead, London, E.11 (to continue, in the School of Pharmacy, London University), investigating solubilisation of certain phenols in soap solutions. Redwood Scholarship (value £350): Mr. Ifor Ll. Thomas, Hockley Heath, Warwicks (to continue, in the School of Pharmacy, London University, research into the elucidation of the structure of solubilised phenols).

Flour and Bread

REVIEW BY STANDARDS COMMITTEE

THE Food Standards Committee of the Ministry of Agriculture, Fisheries and Food, in considering whether, in addition to requirements as to the content in flour of vitamin B₁, nicotinic acid and iron, more extensive regulations governing the composition of flour and bread are needed to protect the consumer, is asking for the co-operation of

the trade, enforcing authorities and other interested bodies in its review. It proposes to consider the need for regulations governing the composition of bread; the appropriate amounts of the three nutrients to be present in flour and bread; the present compulsory addition of calcium; the possible compulsory addition of riboflavine, and the composition and labelling of special types of bread and flour. Organisations wishing to submit evidence on any of those issues should send it to the joint secretary, Food Standards Committee, Ministry of Agriculture, Fisheries and Food, Horseferry Road, London, S.W.1, by October 31.

SCOTTISH NEWS

Examination Results

SCOTTISH INTERMEDIATE SUCCESSES

THE following candidates satisfied the examiners in the Intermediate examination held by the Pharmaceutical Society

in Scotland in July:—
ADAMSON, R., Retford; AINSLEY, S., Durham; ALDERSON, J. D., Crook; ALLI-KIWI, Suzanne E., Heckington; Allison, J. D., Sunderland; Anderson, A. B., Edinburgh; Anderson, Helen A., Edinburgh; ANSTEY, Jean P., Leicester; Armour, Margaret, Sunderland; BAKER, P., Leeds; BARON, D., Blyth; BAXTER, J. A. A., Paisley; BELL, Elizabeth, Glasgow; BELL, Wilma, Earlston; Birch, Joyce P. L., Hull; BOWMAN, J., Newcastle-on-Tyne; BROAD-HURST, P. W., Macclesfield; BURNS, Pat-ricia, Glasgow; BURT, Joan C., Hetton-le-Hole; CAMPBELL A. G., Wigan; CHRISTIE, Hole; Campbell, A. G., Wigan; Christie, J. G., Aberdeen; Cooper, Kathleen T., Aberdeen; Cooper, Peggy, Shipley; Davies, R. E., Leigh; Davies, W. R., Bonnyrigg; Downes, D. F., Manchester; Duncan, B. G., Newport; Dunn, Irene E., Durham; Elliott, H. I., Hetton-le-Hole; Fowler, C., Stockton; Frearson, Grete, Gateshead; Gallacher, Claire P., Coatbridge; Gibson, Diana E., Rosyth; Gourley, M. S., Sunderland: Graham Dorothy LEY, M. S., Sunderland; GRAHAM, Dorothy M., Carlisle; GRAY, Kathrine N., Stirling; HALCROW, J. M., South Shields; HAY,

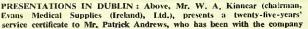
J. M., Ayr; Henderson, K. S. B., Edinburgh; Herworth, R. N., Brighouse; Hewins, G. E., Hull; Irvine, J., Glasgow; Iskander, R. A. M., Cairo; Janssen, P. A., Manchester; Johnson, Patricia, Leeds; Jones, J., Gateshead; Jones, Moira E., Port Glasgow; KLAR, S., Glasgow; LEVIN, H., Manchester; Limback, Josephine M., Hull; Lochhead, Janet D., Denny; Lowes, B., West Hartlepool; Lund, B., York; McDevitt, P. J., Glasgow; MacGregor, A. D., Strathpeffer; McKerron, Christine E. T., Forres; McWhir, E., Chryston; Martin, Doris R. G., Aberdeen; Mason, Kathleen M., Dewsbury; Matthew, Vida E. H., Edinburgh; Maude, J. B., Leeds; Maynard, E. G. H., Wakefield; Murray, G. S., Glasgow; O'Brien, Anne M., Altrincham; Owens, C. A., Abergele; Owens, Sally A., Bradford; PATON, Sheila M. L., Prestwick; Pickering, Jean M., Retford; Powell, A. W., Keighley; Reid, R., Banff; Reilly, T. G., Dundee; Robert-SON, H. P., Dumbarton; ROBINSON, Dorothy C., Dewsbury; Secker, P. A., Huddersfield; Shaw, F., Barrow-in-Furness; Shearlaw, A. J. P., Glasgow; Smith, J. A., Keighley: STEVENSON, R. M., Glasgow; STOCKHILL, T. A., Brough; SUTHERLAND, F. M., Glasgow; SUTNER, S., Manchester; UHRMASHER, J. D., Salford; WALKER, J. R., Cleckheaton; WATKISS, W., Wakefield; WATSON, H. N., Oldham; WATTS, D. D., East Boldon; WESTERN, G. E., Penrith; WATKISS, B. I. Ledde, WILKEL LOS, LAS WHITE, R. L., Leeds; WILKIE, Jean, Hebburn, Wilson, Hazel, Aberdeen; WRIGHT, Pamela H., Ackworth; Young, T. S., Forth.

IRISH NEWS Staff Dinner

IRISH COMPANY'S ANNUAL EVENT

THE annual staff dinner of Evans Medical Supplies (Ireland), Ltd., was held in Dublin recently. Presiding was Mr. W. A. Kinnear (chairman of the company). Among those present were Mr. E. B. Abram (managing director) and Mrs. Abram, Mr. Eric Willis (director) and Mrs. Willis, Mr. Dermot Glavey (director) and Mrs. Glavey.







PRESENTATIONS IN DUBLIN: Above, Mr. W. A. Kinnear (chairman, Evans Medical Supplies (Ireland), Ltd.), presents a twenty-five-years' service certificate to Mr. Patrick Andrews, who has been with the company for over a quarter of a century. A similar certificate was presented to Mr. Steve Heron. The presentations were made concurrently with the annual staff dinner.—At right: Mr. Donald W. P. Boyd, M.A. (chairman, Irish Wholesale Drug Federation) presents a portable radio with album to Mr. John F, Walsh, A.S.A.A., on the occasion of his recent marriage, Mr. Walsh is a partner in the firm of Robert J. Kidney & Sons, auditors and accountants, who are secretaries to the Federation. Behind Mr. Boyd and Messrs, E. B. Abram (Evans Medical Supplies (Ireland), Ltd.), A. D. Davidson and T. Ruddock (May, Roberts (Ireland), Ltd.); P. J. Hooper (Ayrton, Saunders & Co. (Dublin), Ltd.), and A. W. Hughes (St. Dalmas (Ireland), Ltd.).

NEWS IN BRIEF

Two cameras were among items stolen by a smash-and-grab thief from a display window at the pharmacy of Mr. J. G. Harthill, 111 Main Street, Uddingston, Lanarks, recently.

THE Minister of Health has again approved payment (for 1956-57) of the increased annual subscriptions paid by Executive Councils (population groups 75,000 to over 3 million) to funds of the Executive Councils Association (England); the increased rates were first approved in May 1954.

THE "most courteous shop assistant" during a shopping week at Ross-on-Wye, Herefords, recently, was adjudged to be Miss Ann Barnett, an assistant in the pharmacy of Mr. H. E. Middleton. The runner-up (Mrs. F. Brain) is an assistant at the pharmacy of Mr. J. Benjamin.

As a precaution against accidental poisonings of children, the Medical Officer of Health for Oxford in his annual report urges that all boxes of tablets should be labelled. He adds that that could not take place, however, "without the co-operation of the whole medical profession."

WINNERS of a treasure hunt organised among motorist members of the Birmingham Pharmaceutical Association on July 22 were Messrs. Gill, Atkinson, Preston and Round. Forty cars competed, The competitors were entertained to tea by Mr. and Mrs. G. H. Walker, Alvechurch.

THE fourth in the "True Stories" series of booklets issued by the Ministry of Labour and National Insurance "Training for Supervisors," was published on July 30. Copies may be obtained, free, from the Director of Public Relations, Ministry of Labour and National Service, 8 St. James's Square, London, S.W.1, or from any local office of the Ministry.

AMENDMENTS to two food standards effective from August 2 provide for a maximum copper content of twenty parts per million in the whole of tomato ketchup, catsup, sauce and relish in substitution for the existing maximum of 50 parts per million on the total dried solids of such products; and raise the maximum amount of lead permitted in curry powder from ten parts per million to twenty parts per million.

The Therapeutic Substances Amendment Regulations, 1956, which came into operation on August 1, contain provisions as to the method of manufacture of inactivated poliomyelitis vaccine and as to the tests for safety and efficacy to be applied to it; the Statutory Instrument giving effect to those Regulations is S.I., 1956, No. 1131, obtainable from H.M. Stationery Office, York House, Kingsway, London, W.C.2, price threepence per copy.

LOCAL OFFICERS

NATIONAL PHARMACEUTICAL UNION

Manchester and Salford Branch, — Chairman, Mr. A. J. Freeman; Vice-chairman, Mr. H. Fletcher; Treasurer, Mr. J. Tomlinson; Secretary, Mr. A. E. Thorpe, 777 Stockport Road, Levenshulme,

TOPICAL REFLECTIONS

By Xrayser

Holiday Season

With the holiday season at its height, all available and spare qualified men and women are in harness, and the supply is woefully short of the The pharmacist who has put in a heavy winter in an exacting and onerous occupation has earned a break from the daily round and the common task. His hours are long, and the concentration demanded during those hours is such that a complete change is necessary if efficient service is to be given during the heavy months ahead. The difficulties of the single-handed proprietor pharmacist—and by that I do not mean one with no assistant, but one who is the sole qualified—are immense if he has to compete in the open market for the few locums who are in circulation. Happy is he who has a relief who is able to return annually to the same scene and who, by virtue of his regular appearances, comes to be accepted as a friend by the customers! There are pharmacies whose owners can only contrive to have a holiday by closing down altogether. The ideal arrangement would be fewer pharmacies, each with not less than two qualified persons on the staff, for it is not only at holiday times that difficulties arise.

The Locum

While remarking above that the supply of locums is woefully short of the demand, I am not unmindful of the fact that there are reasons for the shortage. One is that there is pharmaceutical work for a much greater number than in pre-war days, when much of the dispensing was done in the surgeries of the doctors, and the spectre of unemployment was in evidence in pharmacy as in shipbuilding and other occupations. It was not uncommon, twenty-five years ago, for disheartened young pharmacists to forget their training and their qualification and accept whatever work offered. I have known the advertising of a poorly-paid vacancy attract as many as a score, any one of whom would have been pathetically pleased to find himself the lucky one. The holiday season was a godsend to those in the surplus-to-requirements category, and no one would want to see a return to that situation as the easy means to secure a holiday. The memory of man is short, and we are by nature equipped to forget our bad times. But the young pharmacist of today should know that he is arriving in pharmacy in more propitious times than his predecessor of the early 1930's. Consequently, the locum of today is generally one who has been through the race and survived to well-earned leisure, returning to his labours for the double purpose of providing a short taste of the freedom he is himself enjoying, and to make it possible for him to continue his own little extravagancies, such as membership of the golf or bowling club, and perchance to purchase an occasional ounce of the tobacco which he grew to like at a time when the price of gold and that of tobacco were quite unrelated.

Education and the Locum

Time was when one hoped to qualify in time for a little seasonal locum work during the summer months immediately following. It was excellent experience for a young man and developed powers of self-reliance at perhaps too young an age, though in years of service the newly-qualified of thirty years ago was already adequately equipped. He had the knowledge of a practical training, both as apprentice and unqualified assistant, of as much as five years' duration before attending college, and he left the examination room with his certificate carefully rolled in a card-board tube, ready to take command the following morning if need be. The present educational policy finds the student looking for a year's practical training before he can register, and consequently little is to be gained by the prospective holiday maker standing outside the examination venue. The chrysalis stage is over, and the wings are beginning to show, but twelve months have to be served before taking flight. So it is that we look to the veteran and regard him with increasing affection.

CENTRAL HEALTH SERVICES COUNCIL

Report on work done during 1955

THE report of the Central Health Services Council for 1955 has recently been published. It contains, in Part I, accounts of two reports by Standing Advisory Committees, one by the Standing Medical Advisory Committee on the medical care of epileptics, and one by the Standing Mental Health Advisory Committee on the medical staffing of mental and mental deficiency hospitals.

Part I also contains an account of work on the fluoridation of domestic water supplies. It says that during the year, the Standing Medical Advisory Committee have considered whether there are likely to be harmful effects upon human beings as the consequence of drinking water fluoridated at not more than one part per million. Their conclusion is that, despite many years of observation and investigation, there is no scientific or medical evidence available which suggests that there is any risk in drinking water containing fluoride in that concentration.

Hospital Supplies

The Committee on Hospital Supplies are reported to have held their first meeting in January 1955. Since then they have invited evidence both generally and specifically from interested bodies and individuals on matters within their terms of reference and have sought information from hospital authorities. They have held six further meetings during 1955, in addition to which there were several other meetings of special sub-committees formed to consider particular subjects. Evidence is still being received by the Committee and it is likely to be some time before a report can be expected.

The Joint Committee on the Classification of Proprietary Preparations met twice during the year and continued its work of classifying proprietary preparations into the categories recommended by the former Joint Committee on Prescribing on Form EC10. Approximately 300 new preparations were classified and the classification of other preparations was reviewed on further evidence. The Committee met representatives of manufacturers who were not satisfied with the Committee's decisions on their written representations about the classification of particular products. As a number of drugs and preparations were deleted from the British Pharmaceutical Codex in 1954, and from the National Formulary in 1955, the Committee found it necessary to review, independently, the therapeutic value of such products before deciding whether or not to change the classification of proprietary preparations containing them.

A second Joint Committee on Poliomyelitis Vaccine was appointed, w the following terms of reference:—
"To advise generally on the conditions which should govern the use of poliomyelitis vaccine in mass immunisation and specifically on such questions as Ministers may refer to them."

A joint subcommittee of the Standing Medical, Nursing and Pharmaceutical Advisory Committees was appointed to advise on the desirability of adopting

a standard system for determining the responsibility for the custody and issue of dangerous drugs and scheduled poisons in hospitals, and for recording the requisitioning and issuing of them. The subcommittee held its first meeting in March, 1955, and met altogether seven times during the year. It began by inviting written evidence from a number of bodies, and subsequently received memoranda from the Central Midwives Board, the General Nursing Council, the Pharmaceutical Society, the Guild of Public Pharmacists, the Association of Hospital Matrons, the Royal Medico-Psychological Association, the Royal College of Nursing and the London County Council. During the year the subcommittee also heard oral evidence from a hospital pharmacist, a hospital administrator, and a hospital matron, each with particular experience of the problems of the smaller hospitals. A report is expected during 1956.

Part II of the report gives an account of the work of the Council's nine standing advisory committees, in so far as that work is not covered in Part I.

The report of the work of the Standing Medical Advisory Committee says that further consideration was given during the year to the problem of the sterilisation of ampoules. Certain criticisms had emerged on the advice previously given to the Minister and recorded in the Committee's report for 1953: first, that there might be invisible cracks in glass ampoules through which irritant substances might percolate, and secondly that detergents used in cleaning syringes might be a cause of irritation following spinal anæsthesia. The Committee invited the Medical Research Council to carry out further investigation of those two problems and as an interim measure advised the Minister that, pending further scientific investigation, the best method of surface sterilisation of ampoules was to wipe them over with a swab dipped in the appropriate dilution of industrial methylated spirit or 70 per cent. alcohol. That might be done by an assistant who held the ampoule while the anæsthetist charged his syringe. In order to avoid any possible complica-tions arising from the use of detergent antiseptic, thorough rinsing of syringes with clean water after they had been washed with detergent antiseptic and soap and water was essential.

The Standing Pharmaceutical Advisory Committee had no occasion to meet during the year, but its representatives took part in the meetings of the joint committee on the custody and issue of dangerous drugs and poisons in hospitals.

The report is available from H.M. Stationery Office, York House, Kingsway, London, W.C.2, price 1s. 9d.

Vials of Penicillin.—The pack of Sol-Viules crystalline penicillin G issued by Boots Pure Drug Co., Ltd., Station Street, Nottingham, contains two vials of penicillin G, 500,000 units per vial, and two Viules of solvent. [Corrected note.]

LEGAL REPORTS

Carton-burning a "Nuisance"

Art Belfast, Northern Ireland, recently, Patrick McKinney, a grocer, who had no place in which to store cartons and "dumped" them on a fire that was smouldering in May's Market, Oxford Street, was fined £4. It was stated that McKinney had made himself liable to a payment of £10 to the local fire brigade, which had been called out to deal with the fire. Other traders were stated to have disposed of waste paper in the same way.

Unauthorised Possession

AT Liverpool, on July 26, an Indian, Abdul Sattar, was fined £25, with £2 2s. costs, for being in unauthorised possession of Indian hemp.—At Bristol, on July 19, a Burman, Mg Mg, was sentenced to six months' imprisonment for unlawfully bringing Indian hemp into this country and trying to evade Customs duty. The prosecuting solicitor stated that 2 lb. 6 oz. of hemp was found hidden behind a ventilator when police searched the ship *Youma* at Avonmouth. The hemp would have made nearly 8,000 "reefer" cigarettes.

Patents Claim Fails

In the Chancery Division on July 23, Mr. Justice Lloyd-Jacob gave judgment in favour of Pharmaceutical Manufacturing Co., The Laboratories, Pitville Circus Road, Cheltenham, and Howards & Sons, Ltd., Uphill Road, Ilford, in an action brought against them by a Swedish company, Aktiebolaget Astra, alleging infringement of a patent in the manufacture of a local anæsthetic (lignocaine). His lordship found that, by reason of a condition attached to the restoration of the Swedish company's patent, the company was not entitled to bring the proceedings.

Unauthorised Prescriptions

AT Kirkcaldy, Fifes, sheriff court, recently, Joseph Anatole France Tobin, medical practitioner, 40 Hunter Street, Kirkcaldy, was fined £6 for three contravents. traventions of the Dangerous Drugs regulations. The charges were that, being a medical practitioner whose authority to possess and supply drugs and preparations under the Dangerous Drugs regulations was withdrawn by the Secretary of State for Scotland in November 1955, Tobin, by means of prescriptions signed by him as a medical practitioner purporting to have such authority, procured for himself a total of 250 mgm. of pethidine hydro-chloride. The offences occurred on May 19 and May 22 at three chemists' shops in Kirkcaldy, the quantities obtained being 100, 50, and 100 mgm. respectively. Tobin admitted a previous conviction in 1944, was fined £2 in respect of each charge. The offences The offences spect of each charge. came to light following a routine police check of chemists' registers. In each case Tobin was not known to the person who supplied him with the drug, but he produced his driving licence and letters addressed to him to establish The prescriptions were his identity. written on notepaper indicating he was at a local hospital.

NEW COMPANIES

August 11, 1956

P.C.—Private Company; R.O.—Registered Office.

A. C. HENNESSY, LTD. (P.C.).—
Registered in Dublin. Capital £100. To carry on the business of retail, manufacturing and general chemists, etc. Director: Andrew C. Hennessy, M.P.S.I., 48 Clontarf Road, Dublin.

TOXANE, LTD. (P.C.). — Capital £1,050. To carry on the business of chemical manufacturers, etc. Subscribers: Jack Altman and Sidney Morris. Secretary: K. A. Beaney, 8 Lonsdale Avenue, Romford.

H. M. JACOBSON, LTD.—(P.C.).—Capital £1,000. To carry on the business of chemists and druggists, etc. Directors: Harry M. Jacobson, M.P.S., and Aurelia Jacobson. R.O.: 91 Cricklewood Lane, London, N.W.2.

NEW ERA CHEMISTS, LTD. (P.C.).
—Capital £1,000. To carry on the business of wholesale and retail manufacturing chemists and druggists, etc. The directors are not named. R.O.: 34 South Molton Street, London, W.1.

G. C. JEFFERSON, LTD. (P.C.).—Capital £6,000. To carry on the business of chemists, druggists and librarians, etc. Directors: Geoffrey C. Jefferson, M.P.S., and Mary Jefferson. R.O.: 11 Frederick Street, Rotherham, Yorks.

EATON THE CHEMIST, LTD. (P.C.).—Capital £5,000. To carry on the business of chemists, etc. Directors: Robert C. Eaton, M.P.S., and Maud L. Eaton, R.O.: 71 Doncaster Road, Gold-thorpe, Rotherham.

J. ABRAMS, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in chemicals, drugs, medicines, etc. Directors: Kate Abrahams and Robert W. Leff, R.O.: 146 Bishopsgate, London, E.C.2.

H. NEEDHAM (PHARMACY), LTD. (P.C.).—Capital £5,000. To carry on the business of wholesale or retail chemists, herbalists, etc. Directors: Gwendoline Needham and Jack Humphries, M.P.S. R.O.: The Pharmacy, Dale Crescent, Matlock, Derbys.

E. H. X. (SUPPLIES), LTD. (P.C.).
—Capital £100. To carry on the business of chemists, druggists, etc. Subscribers: Edward Hack, Silver Haven, South Border, Purley, Surrey, and T. Wander. The first directors are not named.

LEES CHEMISTS, LTD. (P.C.).—Capital £1,000. To carry on the business of wholesale and retail chemists, druggists, etc. Directors: Bertha Lees, M.P.S., and Oscar Ungar (director, O. V. Ungar, Ltd.). R.O.: 62 Brook Street, London, W.1.

H. I. POWELL, LTD. (P.C.).—Capital £2,000. To carry on the business of manufacturers of and dealers in chemicals, medicines, etc. Directors: Harold I. Powell, M.P.S., Edith A. Powell and Eric P. Sorrell, M.P.S. R.O.: 9 Broadmark Parade, Rustington, Sussex.

NAYLORS (CHEMISTS), LTD. (P.C.).—Capital £1,000. To carry on the business of manufacturing chemists, chemists' sundriesmen, etc. Directors: Eric J. Naylor, M.P.S., and Margaret J. Naylor. R.O.: 4 Froghall Lane, Warington, Lancs.

DAVID WARREN & CO., LTD. (P.C.).—Capital £500. To carry on the business of manufacturing, wholesale or retail chemists, etc. Directors: Rex A. Rawstorne, and David J. Warren. R.O.: 110 Pavilion Way, Eastcote, Ruislip, Middlesex.

C. J. SCHOFIELD, LTD. (P.C.).—Capital £100. To carry on the business of manufacturing chemists and drysalters, etc. Directors: Josiah Sargent and Sydney M. Grimshaw. R.O.: Manox House, Miles Platting, Manchester.

G. PARKINSON, LTD. (P.C.)—Registered in Belfast. Capital £5,000. To carry on the business of chemists, etc. Directors: Mrs. Sarah Parkinson, Norman K. Parkinson and George H. Parkinson, M.P.S.N.I. R.O.: High Street, Draperstown.

Company News Previous year's figures in parentheses

JEYES' SANITARY COMPOUNDS CO., LTD. — Mr. Leonard John Williams has been elected to the board.

CHAS. PFIZER & CO., INC., New York.—Net sales, exceeding \$87 millions, were 10 per cent. higher than in the first half of 1955. Net earnings after taxation increased by 17 per cent. during the same period to more than \$9.5 millions, and were equivalent after payment of preferred dividends to \$1.77 per share of common stock (against \$1.58).

BEECHAM GROUP, LTD. — A first interim dividend of 10 per cent. (same) on the ordinary shares for the year ending March 31, 1957, has been declared.

VITAMINS, LTD.—Subject to audit, the group's profit for the year to March 31, after all trading expenses but before charging United Kingdom tax of £82,659 (£81,869), amounted to £188,828 (£181,330. Ordinary dividend, 15 per cent. (same but paid on smaller capital).

BUSINESS CHANGES

MR. L. PARKINSON, M.P.S., has opened a pharmacy at 1 Maldon Road, Great Baddow, Essex.

THE head office of Norman Evans & Rais, Ltd., has been transferred to the works at Unity Mills, Poleacre Lane, Woodley, Stockport, Ches. (telephone: Woodley 2277).

FROM August 6, all British operations of the member-companies of the Brown & Polson Group—Corn Products Co., Ltd., Feculose Co., Ltd. and Farina Dextrin, Ltd.—are being conducted under the name Brown & Polson, Ltd. Users of starch and glucose products manufactured by the group will deal with the industrial products division.

Appointments

FLEXILE METAL CO., LTD., 796 Holloway Road, London, N.19, have appointed Mr. Brian Sellers their sales manager.

LEDERLE LABORATORIES DIVISION, CYANAMID PRODUCTS, LTD., Bush House, London, W.C.2, have appointed Mr. Eric Walters their assistant sales manager.

DEATHS

CARUS.—At Queen's Park Hospital, Blackburn, on July 26, Mr. Edmund Louis Carus.



Thorncliffe, Astley Bank, Darwin, aged fortys e v e n. Mr.
Carus was joint
managing director of Alexander Carus &
Sons, Ltd., surgical dressings
man ufacturers,
Darwin, Lancs.
He is survived
by his widow,
a son and a
daughter.

DORE. — At his residence on July 29, Mr. Michael Dore, M.P.S.I., Bridge Street, Newcastle West, co. Limerick. Mr. Dore, who qualified in 1910, took an active part in the Independence and Irish Language movements. Among those present at the interment were Mr. J. J. Collins, T.D. (chairman, Limerick County Council) and Senator Sean Hartney. Mr. E. de Valera was represented by Mr. D. O'Brian, T.D.

HOLLINGS. — On July 29, Mr. Frank Thomas Reginald Hollings, M.P.S., 430 Marton Road, Grove Hill, Middlesbrough, Yorks, aged sixty-one. Mr. Hollings was a past chairman of the Tees-side Branch of the Pharmaceutical Society.

LEVINSTEIN. — At his home near Maidenhead, Berks, on August 3, Dr. Herbert Levinstein, M.Sc., Ph.D., F.R.I.C., aged seventy-eight, Dr. Levinstein was at one time technical director of the British Dyestuffs Corporation, but resigned that position in 1922. He was elected president of the British Association of Chemists in 1923, and again in 1949–50, and in 1953 received its Hinchley medal. In 1928–29 he was president of the Society of Dyers and Colourists and in 1929–30, of the Society of Chemical Industry. In the next year that Society awarded him its gold medal and in 1947 he was Prime Warden of the Dyers' Company. In 1938 he delivered the Perkin Memorial lecture before the Chemical Society and the Society of Chemical Industry. Dr. Levinstein was interested in the reform of the patent laws.

PHILLIPS.—Recently, Mr. Reginald Boyer Phillips, M.P.S., c/o Philadelphus Jeyes & Co., Ltd., County Buildings, Market Square, Biggleswade, Beds. Mr. Phillips qualified in 1928.

STONIER. — Recently, Mr. Thomas Stuart Stonier, M.P.S., 7 Millview Drive, Tynemouth, North Shields. Mr. Stonier, who qualified in 1893, served his apprenticeship with Williamson & Hogg, Ltd., Tynemouth, and founded his own company, T. S. Stonier, Ltd., Railway Street, Tynemouth, sixty-four years ago. He is survived by one son and one daughter.

SYMONDS. — At 14 Westerfield Road, Ipswich, on July 20, Mrs. Annie Caroline Symonds, widow of the late Mr. James Alfred Symonds, who qualified as a chemist and druggist in 1886.

TRADE NOTES

An Additional Size. — Evans Medical Supplies, Ltd., Speke, Liverpool, 19, have added a fifty-tube box to the packs in which heparin is being issued.

Available as Suppositories. — Sandoz Products, Ltd., 134 Wigmore Street, London, W.1, announce that Cafergot is now available as suppositories. Details and prices are being circularised to customers.

Available as Tablets. — Imperial Chemical (Pharmaceuticals), Ltd., Fulshaw Hall, Wilmslow, Manchester, announce that their Mepavlon brand is now meprobamate available in 400-mgm. tablets in packs of 30 and 250. Mepavlon is a tranquilfising agent for the treatment of anxiety neuroses.

Now Taxed. — James Townsend & Sons, Ltd., printers and lithographers, P.O. Box 12, Musgrave House, Western Way, Exeter, Devon, point out that the Customs and Excise authorities have ruled that white wrapping paper cut down for use as paulds of bottle down for use as powder or bottle wrappers is subject to purchase tax at the rate of 30 per cent.

Distribution Change.—The Distillers Co. (Biochemicals), Ltd., Fleming Road, Speke, Liverpool, 19, have taken over from the yeast and malt-extract department of the Distillers Co., Ltd., Edinburgh, the marketing of D.C.L. brand vitamin-B₁ yeast tablets; dried yeast, B.P.C.; yeast tablets, B.P.C.; malt extract; malt and cod-liver oil; and all other pharmaceutical preparations of malt extract.

Polythene Reduced in Price. - The price of Alkathene brand of polythene and its compounds was reduced by threepence per lb. on August 1. The makers—Imperial Chemical Industries, Ltd., Millbank, London, S.W.1-state that, at the new selling price of 2s. 11d. per lb., polythene, because it is so light in weight, becomes one of the cheapest plastic materials. The reduction in price should encourage a wider use of it in packaging.

All-purpose Personal Weigher. weighing machine suitable for babies, children and adults is manufactured by Herbert & Sons, Ltd., 38 Charterhouse Street, London, E.C.1, and 2 Clarendon Street, Manchester, 15. The machine is made in the company's works at Edmonton, London, N.18, and complies with the British Standard specification and all weights and measures by-laws. It has been specially designed for chemists' shops in which space is limited. The machine is strongly constructed of cast iron, white-enamelled, with tare bar to balance off the baby basket. It is obtainable from trade wholesalers or direct from the makers. Hire-purchase terms are available.

Dispensing Pack Change.—C. L. Bencard, Ltd., Minerva Road, London, N.W.10, announce that, from August 13, the dispensing pack of 240 Paynocil tablets will contain forty foil strips of six tablets instead of twenty-four rolls of ten. It will, therefore, be possible to dispense any quantity of Paynocil tablets retaining the protective cover intact, thus reducing the risk to young children who may be attracted by plea-

sant-tasting tablets found loose in a box. The change brings the pack for Paynocil (aspirin, gr. 10; glycine, gr. 5) into line with that for Junior Paynocil (aspirin, gr. 2½; glycine, gr. 1½.) except that the latter is issued in strips of four tablets. The price is unchanged.

Bacon for Babies. - Trufood, Ltd., The Creameries, Wrenbury, Ches, have added a new variety, bacon and vegetables, to their Spoonfoods range of strained and homogenised foods for infants. It is intended for babies five to six months of age and upwards. The product contains bacon, potatoes, split peas, swedes, onions, barley flour, haricot beans and tomatoes. It has a distinct bacon flavour but, combined with the vegetables, is bland enough to be acceptable. The jar holds $2\frac{3}{4}$ oz.

Cord Switch for Blankets. - Warmglow single-heat electric blankets are now fitted with two-pole cord switch engineered and made in the factory of the manufacturers, Warm-glow Co., Ltd., Leigh-on-Sea, Essex. A number of special features are claimed for the switch, for which patents are pend-ing. Hitherto the types of cordswitch available have not been entirely suitable for electric blankets. It is desirable, if not essential, that

any cord-switch used with electric blankets should break both poles to ensure positive separation of the appliance from the live side of the mains. The Warm-glow cord-switch does so. It is a two-pole toggle-type rated at 250 volts, I amp., a.c. or d.c., with self-cleaning contacts and a life normally well beyond that of the appliance. There are no exposed metal parts, and the switch mechanism is a sealed unit. In the cord-grip none of the pull reaches the switch terminals or distorts the switch body. It has a breaking load of about 100 lb. (B.S. 2612 requires a 20 lb. test). Yet the switch weighs under 2 oz. The right-hand illustration shows a test to which it was put.

One of the Newer Laxatives.—Medo-Chemicals, Ltd., 144 Fortess Road, London, N.W.5, are marketing a new preparation, Dioctyl-Medo (dioctyl sodium sulphosuccinate 0.25 per cent. solution in syrup of orange) for the treatment of severe constipation and impacted faeces. The compound is a synthetic anionic wetting agent which, by reducing surface tension, promotes the absorption and retention of water by the faeces. The product is given orally or by enema. The oral dose for infants is one teaspoonful daily. children, half to one teaspoonful three times a day; and for adults, one to three teaspoonfuls three times a day.

Dioctyl-Medo is issued in 100-mil and 500-mil packs.

Apparatus Prices Held. — British Laboratory Ware Association, Ltd., 6 Queen Street, London, E.C.4, at a meeting held on July 10, unanimously passed a resolution in the following terms:—"That, with a view to effective the following terms:—"That, with a view to effective the following terms:—"That, with a view to effective the following terms of the following tuating the Government policy of price stability, all members will, as from September 1, agree to maintain, for a period of six months, their own existing prices for laboratory apparatus both in the United Kingdom and overseas. And that all members of the B.L.W.A., and all the principal manufacturers of proprietary brands of laboratory apparatus, be sent a copy of the resolution and urged to co-operate with the Association by confirming their support of the resolution,'





Christmas Showrooms. Ltd., 2 Old Bond Street, London, W.l, announce Christmas showrooms as follows:-

BRISTOL: Royal Hotel, room 1, August 20-24.

Leeds: Great Northern Hotel, rooms 20 and 21, August 27-31 and September 3-7.

BELFAST: Queen's Building, 10 Royal Avenue, August 27-31 and September 3-7.

SOUTHAMPTON: Polygon Hotel, rose lounge, August 28–30.

LIVERPOOL: Adelphi Hotel, suite 317, September 3-7.

NOTTINGHAM: County Hotel, regency

room, September 3-7.
GLASGOW: St. Enoch Hotel, room 218,

September 3-7 and 10-14.
BIRMINGHAM: Grand Hotel, Windsor room, September 10–14 and 17–21. Edinburgh: North British Hotel, room

101, September 10-14.

NEWCASTLE: Royal Turks Head Hotel, planet room, September 10-14. MANCHESTER: Queen's Hotel, Queen room, September 10-14.

GRIMSBY: Yarborough Hotel, lodge room, September 11-13.

CARDIFF: Royal Hotel, room 40, September 17-21.

HULL: Royal Station Hotel, room 133,

September 18–21.
MIDDLESBROUGH: Corporation Hotel, room 21, September 25-28.

FIBREBOARD IN INTERIOR FITTING

THE rapid development of certain sheet materials has enabled shops of all sizes to create new and inviting atmospheres without difficulty and at reasonable cost. The ease with which the basic layouts can be altered is often quite remarkable and, in smaller shops, the turnabout can sometimes be effected over a week-end. Most people have at least a nodding acquaintance with the fibre building-board family, the best known example of which is, of course hardboard. New surface the best known example of which is, of course, hardboard. New surface finishes and simplified methods of applications introduced since the war have so widened the scope of this material that there is scarcely a use in modern shopfitting to which it cannot be put

A "Generic" Name

According to the British Standard, fibre building-board is a "generic name for rigid sheet building materials made by a felting process from an aqueous suspension of wood or other vegetable fibre. It may either be homogeneous or laminated with a bituminous or other adhesive." In other minous or other adhesive." In other words, it is wood reconstituted in sheet form. It possesses all the advantages of wood without the disadvantages (knots, grain, etc.). Being snag-free it cannot harm delicate fabrics.

Hardboard, the harder, tougher and more versatile variety, is made in three basic types: standard, medium and super. Standard hardboard, generally in \$\frac{1}{2}\text{-in}\$, thickness, is the most popular for shopfitting and display purposes

In f-In. thickness, is the most popular for shopfitting and display purposes. The super or oil-tempered variety is more suitable for external use or for purposes (such as flooring) in which extra abrasion may be expected.

Medium hardboard, the softest of the three, finds favour for signwork and cut-out lettering, and for relief carving.

It is now possible to buy hardboard with a coloured, enamelled or plastic surface, in addition to the standard natural textures, which vary in shade according to the manufacturer. There s a choice of veneered surfaces and decorative finishes, such as flutes or reeds or grained leather. Also in the category is perforated hardboard (pegboard), which is now available with painted or plastic finishes and accessories as screw-in suspension clips for displaying objects at any angle.

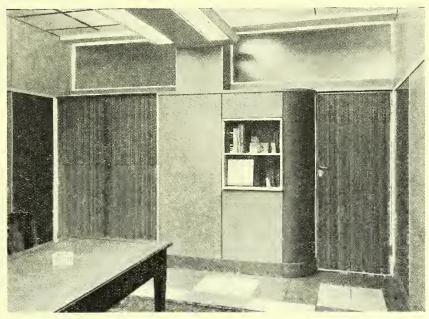
Hardboard is excellent for counter

tops, showcases, shelving and panelling. On the Continent an increasing number of pharmacies are having their premises fitted out in enamelled or plastic-faced board, chosen for reasons of hygiene, attractive and lasting appearance, and easy cleaning. In nany instances customers have inreased as a result and rises in the verage sale are also reported.

Super hardboard is used extensively a flooring surface in shops and store ooms. By using coloured board or poard cut into squares, attractive attractive ffects may be achieved and the only naintenance needed after laying is an

ccasional rub with a wax polish.

The group of softboards includes inulating board, acoustic boards, and les. Insulating board makes an ex-ellent underlay to lino and super



Fibreboards of various grades used as curved wall panel, walls, ceiling with concealed lighting, and floor.

hardboard flooring. Besides providing an inexpensive cushion it also gives insulation against heat and noise. simple method of damping down noise in the shop is to cover the ceiling with fibreboard acoustic tiles, which have a pleasant, perforated appearance. Even plain insulating board has about ten times the sound-absorption value of common building materials, though the factor is reduced slightly if the surface is decorated. Acoustic boards may be decorated without materially affecting their sound-absorbing properties.

An advantage of fibre building-board in the shop is the ease with which it

can be worked by the proprietor or his staff. Only basic tools are needed, and the boards may be fixed with nails, screws or one of the special adhesives now available. Both insulating board and hardboard form excellent bases for distemper, oil paint, cellulose, enamel or plaster. Hardboard is also suitable for staining, varnishing and polishing. A preliminary coat of primer is desirable, and the edges of the board should be "sealed."

The Fibre Building Board Development Organisation, Ltd., 47 Princes Gate, London, S.W.7, operates a tech-nical advisory service covering all aspects of fibreboard use.

SHOPFITTING

Chemists' Display Units. — Liddle, Keen & Co., Ltd., 19 Norland Road, London, W.11, invite chemists' to send for catalogues of their Norland range of standard counters and wall fittings in oak and mahogany.

Simulated-cork Tiles. — Following

their recent introduction of parquet floor tiles in thermoplastic, the Marley Tile Co., Ltd., London Road, Riverhead, Sevenoaks, Kent, are now making Corquette, simulating the appearance of cork tiles in the same material. The tiles are available in buff, tan, fawn and brown, flecked with blending shades of the last three colours.

Versatile "Skeleton" for Display.

Now being produced in Great Britain, the Vizusell system of "store-fixture hardware" has had a wide popularity in the United States and Canada. It consists of light, rigid uprights, brackets, shelves and attachments for quickly erecting shelving for stock and display. In construction no special tools are required. A screwdriver locks the brackets to the channel bars. It is readily and quickly adapted to new arrangements to suit seasonal or other changes of merchandise, and may be used equally well for wall shelving

AND DISPLAY

and for "island" and other display units The registered users of the trade mark in Britain are Versatile Fittings (WHS), Ltd., 55 Fetter Lane, London, E.C.4.

Floor and Shelf Coverings. products announced by Marley Floorings, Ltd., Lenham, Kent, include Marleyflor, vinyl plastic with special backing and Marleyfilm (the same material, without backing). Both products are available to match in light green, yellow, blue, cream, red and grey, each marbled with toning shades. The colours go right through the material and do not fade. The tough vinyl surface of Marleyflor resists oil. grease and domestic chemicals, and has a saturated bitumen-felt backing. Dirt cannot penetrate the smooth surface and stains may be wiped off with a damp cloth. The covering is claimed to give up to 40 per cent. more wear than other flooring materials at the same price. Marleyflor is obtainable in rolls 36 in. wide and approximately 20 yd. long, or in tiles measuring 9 x 9 in. Marleyfilm may be used to cover tables, desks, counters or shelves. It is greaseproof and non-absorbent and is easily fixed to wood or metal.

SYMPOSIUM ON HYPOTENSIVE DRUGS

Co-operation by many organisations

UNDER the auspices of the Co-ordinating Committee for Symposia on Drug Action, a symposium on "Hypotensive Drugs and the Control of Vascular Tone in Hypertension" was held in London recently. The meeting was organised by a committee representing the British Pharmacological Society; Physiological Society; section of experimental medicine and therapeutics, Royal Society of Medicine; fine chemicals group, Society of Chemical Industry; Biochemical Society; Pharmaceutical Society; Association of Anæsthetists; and Society for Endocrinology.

The conference was opened by Sir Charles Harington, F.R.S. (chairman of the Committee) who briefly referred to work done at the National Institute for Medical Research by the late Dr. Harold King on the development of the methonium compounds and elucidation of the chemical structure of d-tubocurarine; and to work by Drs. Ing, Zaimis and others. He invited Professor F. Bergel to preside at a session on "Chemical and Biochemical Aspects."

Action in Relation to Structure

The first speaker was DR. H. R. ING, Oxford, who discussed "Structureaction Relationships of Hypotensive Drugs." Of the veratrum alkaloids, he said, the most potent were the esteralkaloids which retarded the heart-rate and respiration by interference with the afferent nerve endings in the lungs. The vasodilator amidines behaved similarly. Phenyldiguanide, its o-chloro derivative, and 2-α naphthylethylisothiourea were especially potent. Of similar type were tolazoline, hydralazine (1-hydrazinophthalazine), and phentolamine, all of which produced rapid but transient competitive inhibition of noradrenaline.

petitive inhibition of noradrenaline.

Dibenamine (N-[2-chloroethyl] diphenylamine) exhibited a non-competitive inhibition. Onset of its activity was slow and became permanent. The rauwolfia alkaloids (reserpine, deserpidine, reserpinine) also showed a slow onset of action; little was known of their structure-action relationships.

Ganglionic-stimulating and blocking activities were shown by many secondary, tertiary and quaternary bases. Several quaternary trimethylammonium bases exhibited stimulatory activity whilst their triethyl analogues were inhibitors. The bisquaternary ammonium bases, such as hexamethonium and pentolinium, had a purely blocking action. End-groups varied in potency with differences in chain length. The blocking agents were frequently of value in hypertension when administered parenterally. The quaternary bases might eventually be supplanted by tertiary or bistertiary compounds, which were usually better absorbed from the alimentary canal, They were frequently stimulatory in small doses, but inhibitory in larger amounts.

DR. H. BLASCHKO, Oxford, presented a paper on "Biochemical Principles in Relation to Hypotensive Drug Action." He explained that the effectiveness of a given compound was governed by its

concentration in the neighbourhood of the receptor centre. The metabolic pathway appeared to be Tyrosine → 3:4 dihydroxyphenylalanine (DOPA)→. Reserpine had been shown to stimulate the release of 5-hydroxytryptamine (serotonin) from mitochondria, which underwent degradation to 5-hydroxyindoleacetic acid (excreted in the urine).

MR. J. W. BILLINGSHURST, Beckenham, summarised the results of a search for new ganglionic blocking agents.

The second session was devoted to "The Pharmacology of Hypotensive Drugs," Professor J. H. Burn, F.R.S., presiding. In the first paper, by Dr. J. TRIPOD, Basle, on "Some Pharmacological Differences between Hypotensive Drugs with special reference to Hydralazine and Reserpine," the differentiation of hypotensive drugs according to their specific antagonisms of a variety of vasoconstrictor agents was discussed. Fall in blood pressure produced by hydralazine was abolished by previous incubation with rabbit serum. Veratrine and reserpine were not affected by such treatment.

DR. MARTHE VOGT, Edinburgh, discussed "Theories concerning the Site and Mode of Action of Reserpine." The central effects of reserpine (e.g., sedation), she said, were mediated via the hypothalamus, but that was not the only site of action. The effect was different from that of barbiturates, The chief peripheral effect was flushing (dilation of the capillaries) which was independent of the central nervous system. The long latent period of action (½-1 hour) implied that some metabolite was responsible for the effects of reserpine, but no products of hydrolysis had been shown to have any pharmacological action. It has been suggested that the compound caused release of 5-hydroxytryptamine from body stores. It appears that depletion of the 5-HT stores was responsible for the effects of reserpine, but that could not be so since amphetamine also caused a fall in 5-HT storage without inducing sedation.

Antagonisers

DR. W. S. PEART, London, presented a paper on "Substances antagonistic to Adrenaline and Noradrenaline." He dealt with the actions of the β -haloalkylamines dibenamine and dibenylene. Dealing with the theory that those substances owed their activity to the ethylene-ammonium ion, he pointed out that sodium thiosulphate blocked their action by combining with the ion.

action by combining with the ion.
DR. J. G. WIDDICOMBE, London, speaking on "Veratrum Alkaloids," said that intravenous injection produced a fall in blood pressure due to peripheral vasodilation. The cardiovascular effect appeared to be mediated by the vagus, since it could be abolished by cutting

that nerve.

DR. ELEANOR ZAIMIS, London, then reviewed "Ganglionic Blocking Substances." She pointed out that patients varied in the rates at which tolerance to methonium compounds was de-

veloped. Repeated administration of the drugs increased the paralytic effect on the nictitating membrane of the cat, but blood-pressure effects tended to be reduced. Hexamethonium appeared to potentiate the action of adrenaline. Those observations suggested that tolerance might be due to increasing sensitivity of the end organ to adrenaline.

Clinical Applications

At the third session, "Clinical Applications of Hypotensive Drugs," the first paper: "Results of Methonium Treatment in Malignant Hypertension: Five Years' Follow-up," was by Professor J. McMichael, London. He said that the value of the methonium drugs had been assessed in severe cases of fundus oculi. Hexamethonium had now been replaced by pentolinium given by subcutaneous injection three times daily, but it seemed that equally satisfactory results could be obtained with a double dose at night and an afternoon injection. Of the symptoms associated with hypertension, methonium treatment rapidly cleared the retinitis, and the headache disappeared; the size of the heart diminished and signs of heart failure were less obvious; attacks of encephalopathy were usually diminished, but the drugs had no influence on hemiplegia or arterio-sclerosis.

or arterio-sclerosis.

PROFESSOR F. SMIRK, Dunedin, followed with a paper on "Principles and Details of Hypotensive Therapy." He said the aim must be to reduce the blood pressure to normal, but that the presence of other lesions might not permit that to be achieved. Impressive reductions in mortality had been obtained using a combination of reserpine and pentolinium by mouth. The drugs were more effective when the patient was standing than when lying down; when the dose was meticulously adjusted to bring the blood pressure to 120/80 mm., at which point maximum effect was exerted; when drugs were combined (e.g., reserpine with ganglionic blocking agent); and when frequent checks were made of the response of blood pressure to the doses given throughout the period of treatment.

The last paper of the third session was "Hypotensive Drugs: Clinical Evaluation under Controlled Conditions," by Dr. G. A. Perera, New York. No veratrum alkaloid, he said, proved effective unless the dosage was so high that unpleasant side effects were produced. In benign hypertension, pentolinium and hexamethonium had little therapeutic value: the rauwolfia alkaloids exerted benefit by their sedative effects. Insufficient time had elapsed to assess life prolongation but it seemed that survival was prolonged when there was little kidney damage.

The closing session was devoted to "The Control of Vascular Tone in Hypertension." A paper on "Clinical and Experimental Indications" was presented by PROFESSOR CLIFFORD WILSON, London, Except in the case of phaeochromocytoma, he said, the primary cause of hypertension was not known.

In that condition an adrenal medullary tumour secreted an increased quantity of adrenaline and noradrenaline, whose actions could be inhibited by sympathetic blockade. The blood pressure might remain high even after surgical removal of the tumour. There was no evidence in support of the view that over-production of adrenaline or noradrenaline was responsible, and renal lesions had been excluded as the cause. Obesity increased the tendency. Women tolerated hypertension better than men.

DR. B. FOLKOW, Gothenburg, in a paper on "Structural, Humoral and

Nervous Factors controlling Peripheral Resistance," said the resistance to blood flow of the vessels in the forearm was measured when they were fully dilated under conditions of ischaemia. That resistance was unchanged when the normal person was made acutely hypertensive with noradrenaline, but was increased in patients with essential hypertension. It appears that that might be due to a thickening of the vessel wall.

DR. M. A. FLOYER and DR. J. M. LEDINGHAN, London, read papers on "Renal and Extra-renal Factors in Experimental Hypertension."

A RETURN TO PHARMACY

A husband's ill-health prompts venture into proprietorship

IN an ideal High Street situation in the old, historical town of Holywell, North Wales, Mrs. Rachel M. J. Morris,

Mrs. Morris acknowledges help and co-operation from L. Rowland & Co., Ltd., Wrexham, with whom she had pre-



The pharmacy of Mrs. Rachel Morris, Holywell, North Wales.

M.P.S., after several years of retirement, has opened her own pharmacy in premises with unusual bow windows. Many years ago the building was used for stables and coach-houses, and grains of corn were found beneath the old stone floor when it was removed by the contractors. In place of the original building there is now a light, attractive pharmacy designed by Mr. F. C. Roberts, B.Arch., F.R.I.B.A., Mold, Flints. All woodwork, both interior and exterior, is in naturally-finished oak, and a special non-slip flooring makes a safe walking surface whatever the weather. Large display cases are a feature of the internal layout, and the lighting has been arranged so that no part of the shop is in shadow at any time.

Back from "Semi-retirement"

Mrs. Morris qualified at the Pharmaceutical Society's School of Pharmacy in 1934; then went to the Soho Hospital for Women, and the Seamen's Hospital, Greenwich. Her father, the late Mr. James Thomas Morgan, B.Sc., M.P.S., died shortly before her marriage in 1938. From "semi-retirement" "Miss Rachel" as many local people call her, has returned to the pharmaceutical world on account of the failure of her husband's health. As a proprietor pharmacist she has been highly successful, and has had to take on extra staff.

vious business contacts, and who did most of the stocking of the premises and ordering of drugs.



Mrs. Morris at the counter.

IN PARLIAMENT

IN a statement in the House of Commons on August 1, on economic statistics, MR. HAROLD MACMILLAN (Chancellor of the Exchequer) announced that the Government proposed to institute an annual sample inquiry in the distributive and service trades which must be compulsory so that the value of the figures willingly supplied by the majority of traders would not be nullified by the inaction of a minority. In addition they would be asking more firms in those trades to provide on a voluntary basis quarterly information on fixed investment and stocks. The figures the Government needed were few but vital, and he believed they could be provided without undue trouble. The Government proposed to invite a number of companies voluntarily to provide quarterly estimates of profits, in confidence, to the Inland Revenue. Only summaries of the returns, which would not reveal the affairs of individual concerns, would be published.

Restrictive Trade Practices Act

The Restrictive Trade Practices Act, 1956, received the Royal Assent on August 2.

Gowers Committee Recommendations

MR. J. V. WOOLLAM asked the Home Secretary whether he would consider the opinions of interested staff associations and trade unions before introducing a Bill to implement the recommendations of the Gowers Committee on conditions of employment in shops and offices. MAJOR GWYLYM LLOYD-GEORGE (Home Secretary), in a written answer on August 2, said he was always ready to consider the views of those associations on such matters.

Myxomatosis

MR. D. HEATHCOAT AMORY (Minister of Agriculture, Fisheries and Food) told MR. A. R. HURD, in a written answer on August 2, that myxomatosis was still smouldering or slowly spreading among light infestations of rabbits in parts of Cumberland, south Lancashire, West Riding of Yorkshire, Cheshire, Staffordshire and Merionethshire. Small outbreaks had also been reported in other counties. Rabbits in small but increasing numbers were appearing in most areas of England and Wales. Reports of reinfestation were being followed up by county pests staffs.

Medical Bill

The Medical Bill was read a third time in the House of Lords on August 1, and passed.

N.H.S. STATISTICS

In London during 1955-56, 19,896,965 prescriptions (10,101,917 forms) were dispensed at a total cost of £4,110,199. Average cost per prescription was 49-58d. In the pharmaceutical list were 1,138 pharmacies, twenty-five drug stores, and 249 surgical appliance suppliers. Patients' prescription charges totalled £569,691.

In Lancashire during 1955-56, 1,726,789 prescriptions were dispensed at an average cost of 52:54d. Pharmaceutical services cost £2,101,263.





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Tranquillisers: A Warning

ALMOST coincidentally with a mass of newspaper publicity—accurate or lurid—for the many new proprietary drugs which, whatever their chemical relationship, have been grouped together under the general name tranquillisers, the Council of the Pharmaceutical Society has come out with a warning to its members (p. 144) not to supply the drugs to customers unless satisfied that they are going to be taken or given under medical supervision. It is right that such warnings should be given, provided always that it is intended that they shall be followed by legislative control. Statute law can obviously take no account at the time of its enactment of substances that were not even thought of at the time the legislation was introduced. Potentially dangerous substances may come on to the market before the law can catch up with them and during the interim period the Society is performing a responsible and valuable task in giving guidance to its members on the attitude which they, as professional people with their own need to act responsibly to the public, should take up.

It should also be, in our view, the policy of the Council to abide by the eventual decision of the Poisons Board, whatever that may be. [Curiously, the Society's Council has referred the question of tranquillisers to the Ministry of Health and not the Board.] If the Board should, in its wisdom, decide that not every product about which the Council of the Society has given a warning requires to be issued to the public solely on prescription, then the Council should accept the verdict of what is, on this matter, the higher authority, and refrain from trying to impose a double code on its members.

We are not suggesting that any or all the drugs affected by the present warning will come within that category. Recent events seem to indicate some amount of haste by pharmaceutical manufacturers to cash in quickly on a new idea before the drug it embodies becomes listed as demanding control. We have no doubt that they are all satisfied, before each launches its new speciality, that the product is without undue risk to the user. However, experience has shown that toxic side-effects may become evident often long after the drug has been used with every appearance of safety over a comparatively long trial period.

The time may have come, even at the hazard of penalising for a time quite innocent and harmless compounds or preparations, to introduce machinery by which every new drug is, for a probationary period, nade subject to a "prescription only" requirement. If

for that period, and on evidence that there has been adequate opportunity for side-effects to show themselves, the drug has a blameless record, then it should be given its "clearance" in due course. That would be entirely in the public interest, and it would have the merit of putting manufacturers on a level basis to begin with. Nothing can be less fair to manufacturers than for controls of specialities to spring up on an arbitrary or incomplete assessment of values and risks.

Recruitment Under the New Regulations

The new draft Regulations for registration as a student agreed to by the Pharmaceutical Society's Council (p. 144) advance the standard of entry for students of pharmacy. One would expect the number of entrants to fall in consequence. But the claim is made by the chairman of the Education Committee that higher standards will attract into pharmacy more "pupils" with higher educational attainments, and will ensure that students lacking the ability to qualify will be eliminated at the start rather than at a later stage in their training. Thus, on balance, an increase in the number of students who pass into the profession may be expected.

But is the Society assuming that a school pupil decides on a career and then aims at securing the necessary educational standard? Surely all pupils aim at the highest educational goal within their power? The new regulations will therefore simply cut out all those who, having the lower educational attainments, would in the past have gained entrance to pharmacy as a career. So far as attracting sixth-formers is concerned, are not the majority of them already thinking of a university education? It is hard to see how the new regulations will lead them to decide on pharmacy as their field of study.

More than likely they will accept or reject pharmacy as a possible career from considerations other than educational requirements.

In fine, although the authors of the new regulations seem happy that their plans will not adversely affect recruitment to pharmacy, the only evidence that they have produced in support of that conviction bears a strong similarity to wishful thinking.

It remains, moreover, astonishing that, as we have already remarked (C. & D., July 28, p. 93) proposals that may have such a profound effect upon the practice of pharmacy should have been passed with so little public discussion (or discussion "in public session").

Tax Allowance for Cars

A RULING given recently in the Chancery Court, London, may have far-reaching effects. It put the income-tax inspector in a position to query the business necessity of items claimed as business expenses. It is now expected that tax inspectors will have to look specially at all cases of new purchases of expensive cars charged to business accounts and ask the taxpayer to justify their choice of such cars. Inland Revenue authorities cannot go so far as to argue that, where delivery only, say, of medicines, is concerned, a van should be used. The taxpayer has the right to select a dual-purpose vehicle, and naturally he would not select a small car if he has a large family and can afford a larger car, but strictly speaking he is only entitled to charge the delivery fraction, and its capital cost and running expenses, against his business profits.

HORMONES: 1

Drugs with endocrine activity

By S. J. HOPKINS, F.P.S.

ORMONES may be regarded as the engineers of metabolism. They have the power of initiating, stimulating and controlling many of the processes concerned with growth, health and reproduction, though the mechanism of their action is still imperfectly understood.

In the past, many hormone preparations were used therapeutically, often for conditions quite unrelated to any hormonal disturbances. Those therapeutic misconceptions arose from several causes, not the least being the difficulties of extracting pure hormones from the natural organs in which they are found. In attempts to overcome those extraction difficulties dried gland preparations were used, but, as many hormones are broken down by the gastric juices, the products were frequently of little more value than an equivalent amount of protein.

Improved extraction processes, and a wider realisation of the great changes in activity that may accompany small changes in structure, have widened the boundaries of endocrine chemistry, and hormone therapy now rests on a substantial basis.

For practical purposes, hormones may be divided into four main groups:—

(1), The relatively simple hormones exhibiting an aminoacid structure, such as thyroxine.

(2), Hormones with polypeptide or protein characters, as exemplified by insulin.

(3), The steroid hormones.

(4), Synthetic compounds with hormonal activity.

Thyroxine

To explain the function of the thyroid gland, many ingenious theories were advanced before the association between atrophy of the gland and the subsequent symptoms was recognised by Gull in 1874. The term myxædema, subsequently applied to the hypothyroid syndrome, relates to the belief that the subcutaneous thickening characteristic of the disease was due to deposits of excess mucus. The activity of the thyroid gland is due to thyroglobulin, an iodinecontaining protein with a molecular weight of about 670,000. Kendall (1915) isolated from that globulin, after hydrolysis, an active fragment now known as thyroxine, which has the following structure:—

Di-iodotyrosine also exists in the gland. It is considered to be a precursor of thyroxine.

The synthesis of the hormone by the gland is a complex process, and leads from the removal of circulating iodine by the gland to the iodination of pre-existing tyrosine, followed by the conversion of di-iodo-tyrosine to thyroxine. The conversion could occur by removal of one alanine side-chain from

the precursor and the coupling of the residue with unchanged di-iodo-tyrosine.

The nature of the remaining side-chain is important. Nitrogen substituents reduce the activity, and replacement leads to inactivity, unless the replacement group has a functional amino or carboxyl group. The ether linkage, too, is essential for sustained activity, and the terminal hydroxyl group also plays a significant part. If the hydroxyl group, for example, is replaced to form ortho-thyroxine, only one-twenty-fifth of the original activity is retained. Activity is also closely linked with halogenation. Thyronine itself is inactive, and chlorination, bromination and iodination increase the activity in that order.

For a long time it was thought that all the activity of the thyroid gland could be ascribed to the thyroxine, but further research disclosed some anomalies. A difference was demonstrated between the metabolic effects of thyroid extracts and thyroxine, and the existence of some other factor was suspected. Isolating that unknown substance was surprisingly difficult, but the problem was eventually solved by using radioactive iodine. Hydrolysates of thyroid tissue, prepared after uptake of that tracer material, were subjected to chromatographic separation methods, and the process revealed the existence of a previously unknown iodine-containing amino acid: 3,5,3'-tri-iodo-thyronine.

The activity of the hormone tri-iodo-thyronine is quantitatively similar to that of thyroxine, although on a molecular basis it has a greater potency. The effects of thyroxine, on the other hand, are more persistent, but Frawley and others (1956) report that the new drug is active even in patients that have become refractory to thyroid and thyroxine. Until very recently, it was considered that some brominated compounds, whilst they showed thyroid activity, were too weak to be used therapeutically. Pitt-Rivers and her associates have now shown that 3:5:3-tribrom-dl-thyronine has about half the activity of thyroxine, yet in the tetra-brom compounc activity falls to 1/200th. Compston and Pitt-Rivers have since used the tri-brom compound therapeutically, and ar adequate response was obtained with doses of 1 mgm. daily The discovery of high activity in non-iodine analogues of the thyroid hormones is surprising, and may lead to change in the accepted views of thyroid physiology.

For ordinary therapeutic purposes both dried thyroid and l-thyroxine are available. The pure hormone, once a chemica curiosity, is now prepared by synthesis on a commercia scale, and is preferred by some prescribers. The official dos of thyroid is gr. ½-2, and the B.P.C. dose of thyroxin sodium is 0·1-0·5 mgm. For practical purposes 0·1 mgm. o thyroxine is regarded as equivalent to 1 grain of thyroic With both drugs, some days elapse before the therapeuti action begins, and initial doses should therefore be low i order to avoid cumulative effects. Particular care is neede with thyroxine, initial doses of which should not excee 0·1 mgm. Subsequent doses may be increased at interval of ten to fourteen days until the optimum effect is obtained

The main use of thyroid preparations is in the treatment of thyroid hypofunction. That has two main forms: myxœdema and cretinism. The second is a disease of infants, but myxœdema may be found in both children and adults, and the symptoms, which are well defined, correspond to the degree of deficiency. The face becomes puffy and expressionless, the skin cold and dry, and the hair brittle and thin. The basal metabolic rate falls, and the patient becomes sluggish, apathetic and lethargic. Administering thyroid produces a rapid remission of symptoms, the majority disappearing within ten days, given adequate dosage. Treatment must be continuous but, apart from that disadvantage, few therapeutic measures offer so regular and adequate a response.

Cretinism is due to congenital thyroid deficiency, and early treatment is essential if normal development is to be achieved. The signs and symptoms of cretinism are dry skin, thick lips, large head, small body and generally delayed development. The signs may not be apparent until the third to the sixth month, but if thyroid treatment is started at once there is reasonable hope that subsequent development will be normal. If, however, the signs go unrecognised, or if treatment is delayed until the child is a year old, the harmful effects of early thyroid hypofunction may never be eliminated.

Thyroid Hyperfunction

Excessive activity of the thyroid gland leads to a condition often referred to as thyrotoxicosis. A patient affected by that condition presents a picture almost the opposite of the one presented by myxœdema. He is nervous and irritable, has rapid pulse, high blood pressure, and prominent eyes. Surgical removal of the gland may be necessary, but as an alternative antithyroid drugs are often used. Those substances suppress the synthesis of the thyroid hormones. Following administration of such a drug, the amount of circulating thyroxine falls. As a consequence the anterior pituitary gland secretes an abnormally large amount of thyrotrophic hormone. The hormone in turn stimulates the thyroid gland to produce more thyroxine, but suppression of thyroxine formation, in spite of that stimulus, is usually complete enough to produce remission of the symptoms of thyrotoxicosis.

A number of substances are known which interfere with thyroid action in that way. Cabbage seeds were long recognised to contain a thyroid suppressant, and eventually it was discovered that thiourea exhibited the same effect to a marked degree. Thiourea was used therapeutically for a time, but later it was found to be too toxic. Subsequently a number of less toxic substances have been developed as antithyroid drugs. They include thiouracil, methyl thiouracil, propyl thiouracil, iodothiouracil, methimazole, carbimazole and potassium perchlorate. It is noteworthy that sulphonamides, p-aminosalicylic acid and thiobarbitone also have some antithyroid action. The structural formulas of the majority of those compounds, when compared, show certain similarities, in particular a structure derived from the thioureylene radical -NH-CS-NH-. That link is found in both straight-chain and heterocyclic ring compounds as shown at top of next column.

The exact mode of action of those substances is not yet known, but the evidence points to some interference with an enzyme system such as that in which oxidase is concerned. With the exception of potassium perchlorate, the compounds do not prevent the uptake of iodine by the gland. They appear, however, to hinder the iodination of tyrosine, and so to inhibit the subsequent formation of thyroxine and thyroglobulin. A further action may be the removal of iodine by combination with the antithyroid drug. Some drugs that have a structural relationship with tyrosine may also act by competitive inhibition of iodine take-up.

With potassium perchlorate, introduced by Morgans and Trotter, the mode of action is different. The compound interferes with the iodine take-up by the gland, a process untouched by the thiouracil drugs. Those compounds are effective whatever the level of circulating iodine, but potassium perchlorate may be ineffective when the concentration of iodine in the blood is high. Nevertheless, it is a useful

alternative to the other drugs, being free from the side-effects.

Therapeutically, the antithyroid drugs are used in the control of hyperthyroidism and for the stabilisation of patients before surgical removal of the thyroid gland. Medical control is most effective in the younger patient with the milder symptoms of excessive thyroid function. patients, or those who require large doses of antithyroid drugs, are perhaps best treated surgically. For stabilisation before operation iodine itself, the oldest of the antithyroid drugs, is still preferred by some surgeons, and it is given in surprisingly high doses. The puzzle of how an element essential for the synthesis of thyroxine can also, for a time, act as a suppressant still remains to be solved.

Use of iodine results in a firmer thyroid gland, whereas with the newer antithyroid drugs the gland becomes more vascular and friable, and the surgeon's difficulties increased. Alternatively a course of antithyroid drug followed by iodine may be given-or, when available, a compound such as iodothiouracil. Another scheme of treatment has been advocated by Fraser and Wilkinson, using both thyroxine and methyl-thiouracil. The treatment is based on the theory that, by giving enough uracil drug to block thyroid formation completely, together with small amounts of thyroxine to supply body needs, the secondary increase in thyroid-stimulating hormone by the pituitary gland would also be suppressed, thus eliminating any risk of thyroid hyperplasia, and perhaps obviating the need for surgery at a later date.

The doses of these antithyroid drugs vary widely, and must be adjusted to the needs of the patient. The substances are potentially toxic, and in susceptible patients may cause vomiting, dermatitis and leucopænia. It should be noted that they are not intended for or indicated in the treatment of simple goitre, where the enlargement of the thyroid is a physiological response to underactivity of the gland. The use of antithyroid drugs in such circumstances would accentuate the existing deficiency and lead to further thyroid enlargement, or possibly precipitate myxodæmatous symptoms.

Average doses are summarised below, but dosage requires to be adjusted to the patient's degree of hyper-thyroidism, response and tolerance.

Drug	Dosage Range
Thiouracil Methyl-thiouracil Propyl-thiouracil Methimazole Carbimazole Potassium perchlorate	100-200 mgm. 50-200 mgm. 25-100 mgm. 5-15 mgm. 5-15 mgm. 50-200 mgm.

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PHARMACEUTICAL SOCIETY OF GREAT BRITAIN

NEW EDUCATIONAL REGULATIONS APPROVED

Statement on tranquillising drugs

THE Council of the Pharmaceutical Society approved, at its meeting held in London on August 1, new draft regulations for registration as a "student," and for the Society's Entrance examination, the regulations to operate from March 1, 1958. The amendments are being submitted to the Privy Council for approval.

A motion to defer the decision till the October meeting of Council having been lost, Messrs. J. C. Bloomfield, J. M. Dowty and T. Heseltine asked that their names should be recorded as having voted against implementing the new regulations at present. MR. BLOOMFIELD said that he was not in favour of the proposed insistence on a language other than English. The headmaster of a grammar school had told him that pharmacy was losing recruits because some pupils taking scientific subjects would not take classics or a foreign language. The new regulations might further reduce the number of entrants to pharmacy.

Other members of Council supported those views.

Foreign Language Requirement

MR. C. W. MAPLETHORPE (chairman of the Education Committee) said that the foreign language requirement had been retained because to do otherwise would be prejudicial to those students who, at some future stage decided to take a pharmaceutical degree: most universities required a foreign language. The method devised in the regulations would attract sixth-form boys and girls into the profession, while leaving the way open for others who wished to leave school at sixteen-plus having taken the General Certificate of Education at ordinary level, to take later the necessary G.C.E. subjects at advanced level after training at a technical college or elsewhere. As he saw it, the chances were that more pupils would enter pharmacy than before.

MR. BLOOMFIELD said that the Council was dealing essentially with the Society's diploma, and had no control over the requirements for a degree. Therefore it was wrong for them to make any sort of comparison between degree students and diploma students.

Mr. H. S. Grainger said that the question of a foreign language was being made an unnecessary bogy. A person who was able to meet the other requirements at advanced level was not likely to find great difficulty in reaching the ordinary level in a foreign language. It was short-sighted to say that because the Council was not legislating for degrees-it must take no cognisance of possible degree students. Many changes were taking place in the educational field, and the status of the Society's diploma itself was being affected by the new type of technical college that was beginning to take shape under recent enactments. It was in any case the policy of the Council that, in process of time, the Society should encourage students to qualify by means of a degree. If circumstances made it difficult for a student, having gone into pharmacy, to take the degree course, that might in the future cause the Society considerable difficulty. It might be that more and more students would go to universities, and that all of them would become degree students. If so, the Society should not regard that as a matter for great regret. He did not want the pharmacists of another generation to find, as some had found in the past, that, having taken what they thought was the best qualification, they might have taken a degree if they had been better informed and the regulations more carefully drawn.

MR. HESELTINE questioned whether, in the future, the universities would have more students and all of them taking a degree course. He thought costs would prevent that.

In reply to the President, Mr. Maplethorpe said it was

not possible to state that, if a student entered pharmacy under the new conditions, he would be eligible for a degree course. By and large, he thought that would be so, but universities were constantly changing their requirements.

The new regulations are:—

FOR REGISTRATION AS STUDENT

- 1. An applicant for registration as a "student" shall produce to the registrar evidence from the examining body that he has passed:
- (1) the General Certificate of Education examination of any of the examining bodies included in Appendix 1 to those regulations either:
 - (i) in five subjects as follows:

(a) English language;

- (b) a language other than English;
- (c) mathematics;

(d) two other subjects.

(Two subjects must have been passed at advanced level, and one subject at ordinary level, on one and the same occasion.)

(ii) in six subjects (not necessarily passed on the same occasion) as follows:

(a) English language;

(b) a language other than English;

(c) mathematics;

(d) three other subjects.

(Two subjects must have been passed at advanced level.) Provided also in either case that unless chemistry, physics and biology have been passed at advanced level in the General Certificate of Education examination, the applicant shall submit evidence of having passed the Society's Entrance examination in any of the subjects chemistry, physics and biology not passed at advanced level in the General Certificate of Education examination.*

(2) the Leaving Certificate examination of the Scottish Education Department, or the Scottish Universities Preliminary examination, provided in either case that the applicant has passed (or has been deemed to have passed) at not more than two sittings of the examination in:

(a) English;

(b) a language other than English;

(c) mathematics;

(d) one other subject (provided that all subjects are passed on the higher standard) or two other subjects if only three subjects (which must include English) are passed at the higher standard.

Provided also in either case that the applicant shall submit evidence of having passed the Society's Entrance examination or the General Certificate of Education examination at advanced level in chemistry, physics and biology.*

- 2. The Council may accept certificates of having passed other examinations which in its opinion are of a standard equal to those mentioned above.
- 3. The fce to be paid for registration as a "Student" shall be £4 4s.

FOR THE ENTRANCE EXAMINATION

- 4. The examination shall be held four times a year commencing in or about the third week in March, June, September and December and in such centres as the Council may from time to time prescribe.
- 5. A candidate shall apply to enter for the examination and pay the prescribed fee to the registrar on or before the first day of February, May, August or November for the examination commencing in the following month.
- 6. The subjects of the examination shall be chemistry, physics and biology. The examination shall be conducted in accordance with the syllabuses set out in Appendix 4 of those Regulations or as they may be varied from time to time by resolution of the Council published in the Society's journal.

7. A candidate who satisfies the examiners in any subject

shall have passed the examination in that subject.

8. The fee to be paid for entry to the examination shall be £3 3s, for examination in any one subject. The fee shall be paid at the time of applying to enter for the examination. Except in the following circumstances no fee or portion of a fee shall be returned:—(1) A candidate who withdraws before the last date of entry for the examination shall receive back the

fee paid; and (2) A candidate who has entered for the examination but fails to present himself and submits to the registrar proof satisfactory to the Council that his absence was due to illness or other unavoidable cause shall receive back the fee paid.

* Although normally it is not permissible to commence practical training under prescribed conditions in a pharmacy, hospital pharmaceutical department or manufacturing pharmaceutical laboratory until after registration as a "Student," it is permissible, with the consent of the Council, to commence such practical training when two only of the three subjects Chemistry, Physics and Biology have been passed in the General Certificate of Education examination at advanced level or in the Society's entrance examination.

Tranquillising Drugs

On the recommendation of the Ethical Committee, the Council authorised publication of the following statement

on tranquillising drugs:-

"The Council has considered the situation produced by the recent introduction of a number of new products which owe their use to their depressant action on the central nervous system and are commonly known as 'tranquillisers.' While those drugs are not advertised to the public, a widespread public knowledge of them has been created by newspaper articles, and there is a substantial demand for them otherwise than on prescription. The indiscriminate use of such drugs is, in the Council's opinion, against the public interest, and the Council is approaching the Ministry of Health requesting an early consideration of that class of drugs. Pharmacists are advised not to display them nor to supply them unless satisfied they will be taken on medical advice."

The Council adopted a recommendation by the Organisation Committee that evening meetings of the Society should not be held regularly in future. The attendance at and interest taken in evening meetings recently had not been satisfactory and it was proposed that meetings should be held only when there were matters that appeared to be of sufficient interest to pharmacists generally to ensure an adequate attendance. The question of organising meetings to meet the needs of special interests within pharmacy would be considered.

MR. MAPLETHORPE said that from the results of inquiries so far received it appeared that there were at present 4,000 students "in the pipeline." Of the total number of students, probably 1,000 were working for a degree and 1,600 for the diploma. The proportion might be taken as roughly com-

parable with that of previous years.

A report was given on the Society's exhibit at the careers exhibition recently held at Brockenhurst county grammar school. The headmaster thanked the Society for the display, and for the interest taken in the project by Messrs. Bloomfield and Dowty. There had been 4,000 visitors to the exhibition. The Education Committee thanked the office staff, and asked that thanks should be sent to Messrs. H. A. Cocking and A. Radclyffe (Wellcome Foundation) for valu-

able help given with display material.

THE VICE-PRESIDENT reported to the Education Committee that, at the request of the Brighton and Hove Branch, the director of education of the county borough of Brighton had received a deputation, which had made representations to him for the inclusion of a school of pharmacy in the plans for the proposed University of Sussex. The deputation had consisted of Miss Mary Burkitt, who introduced the deputation on behalf of the local Branch, the secretary and registrar of the Society, Professor Berry and himself, and thus represented not only all the Branches in Sussex but also pharmacy generally. The director had noted the national significance of the deputation, and had undertaken to bring its views before the appropriate committees concerned with the formation of the proposed university.

The Education Committee considered a letter from the registrar-treasurer of the Ontario College of Pharmacy stating that the council of the college had agreed upon revised regulations for the registration as pharmaceutical chemists in Ontario of graduates from colleges or universi-

ties outside the Province of Ontario. It was expected that the regulations would become operative either on January 1, 1957 or one year later. The revised regulations require applicants to be Canadian citizens between the ages of twentyone and forty, and resident in Ontario for six months before submission of the application. The applicant's qualifications at the time of graduation must be at least equivalent to those in Ontario at that time. The fees payable, including an examination fee, amount to \$150 (about £53 11s.). All applicants must pass a licensing examination within twelve months from approval of the application. It was pointed out that those regulations were to be applicable not only to pharmacists from Great Britain but to all applicants, irrespective of the country in which a pharmaceutical qualification was obtained. The number of applications to be granted in any one year would be limited to 1 per cent, of the number of practising pharmacists in Ontario. The Education Committee's report noted that the reciprocal recognition of qualifications had originally been agreed between the Society and the Ontario College in 1923, by exchange of letters, the requirements being in effect that the applicant should satisfy the authority concerned as to his bona fides. In 1930 it became clear that the Ontario College was requiring, in addition, evidence of six months' employment in Ontario before consideration of an application. The Committee agreed that further consideration should be given to the policy to be adopted in respect of applicants from Ontario wishing to be registered in Great Britain.

Five Years for Citizenship

MR. MAPLETHORPE said it was understood that a British pharmacist would have to be resident in Canada for five years to obtain Canadian citzenship. The Committee proposed that the information should be published so that there should be no misunderstanding among any of the Society's members who might be going to Canada.

MR. GRAINGER said it would be a pity if the new Ontario regulations led to the ending of reciprocity arrangements with this country, as Canadian qualifications were, on the whole, on a good educational level. But the whole business of reciprocity would have to be looked at, and the Council had given notice of its intention to review it at the end of five years, two of which had already elapsed. In the not too distant future a meeting of pharmaceutical authorities should be arranged to find a solution.

MR. MAPLETHORPE agreed that, while the information must be published to safeguard British pharmacists who might be emigrating, the whole question of differing standards must be considered. The fact that each State in Canada had its own regulations produced a complicated situation inside Canada, and it was local reasons that had caused the present development.

The Education Committee received the report of the Research Scholarships Committee, and recommended that the following awards should be made for the academic year 1956-57: Pharmaceutical Society Research scholarships, William Boyle, Glasgow, and David Wright, London; Redwood scholarship, Ifor Llewellyn Thomas, London.

The report on the scholarships examination, 1956, was received, and the Education Committee recommended that the Manchester Pharmaceutical Association scholarship should be awarded to David Colin Williams, Seaforth, Liverpool. The Council approved the recommendations.

MR. BLOOMFIELD called attention to the fact that only five students had entered for the scholarships examination, and that only one had been successful. He asked whether serious consideration had been given to the question whether the examination should be continued.

THE CHAIRMAN said that it was one of the Committee's duties to examine the scholarships position. The question whether a sum of money given for a pre-graduate scholarship could be transferred and used for a post-graduate scholarship was being investigated. The Committee took the same view as Mr. Bloomfield about the poor entry, and when

the question of legacy conditions had been cleared up they would try to revise the whole of the scholarship arrangements.

The Council authorised the president to award the Council prizes for 1956 in accordance with the recommendations of the examiners.

The special committee appointed to consider the making of grants for educational purposes recommended grants amounting to £2,000 for the current year to institutions in recognition or encouragement of services to pharmaceutical education or research, and amounting to £2,250 to individual research workers and for maintenance or special purposes. The recommendations were adopted.

It was reported that the vice-president had been elected chairman of the Public Services Committee for the year.

Liaison Committee on Proprietaries

Replies to the suggestion of the Branch Representatives' meeting that a liaison committee should be formed to discuss problems of marketing, prescribing and dispensing proprietary medicines were reported to have been received from the National Pharmaceutical Union, the Association of British Pharmaceutical Industry, the Proprietary Association of Great Britain, and the Guild of Public Pharmacists. The Chemists Federation was to discuss the suggestion at its council meeting in September. The Public Services Committee agreed that, while the formation of a permanent liaison committee might not be justified, consideration should be given to calling a meeting of representatives of interested bodies to discuss any matters of particular difficulty, and the secretary was asked to prepare a draft agenda of such a meeting for consideration at the next Committee meeting.

A letter was received from the Leeds Regional Hospital Board asking the Society to suggest the names of five pharmacists, not employees of the Board, from whom two might be selected to undertake an independent survey of the hospital pharmaceutical service in that region. The Council agreed on the Committee's recommendation that a reply should be sent welcoming the approach made by the Board, and stating that inquiries were being made to find pharmacists willing and able to undertake such a survey.

The Finance Committee considered the resolution of the Branch Representatives' meeting calling upon the Council to investigate, in co-operation with the National Pharmaceutical Union, the possibility of establishing a superannuation scheme or schemes that would meet the requirements of both proprietor-pharmacists and employee-pharmacists. On the Committee's recommendation the Council agreed to discuss the need and practicability of such a scheme with the N.P.U., and the registrar was authorised to take further steps in the matter at his discretion. The Council decided to issue a statement advising members in no circumstances to enter into undertakings with insurance companies in connection with superannuation schemes pending further advice from the Society.

The Council approved a new design for the membership and registration certificate of the Society.

The Establishment and Publications Committee reported that a small exhibit of medical caricatures by Gillray, Cruickshank and Rowlandson was on view in the Society's library.

The curator's report described an exhibit entitled "The Pharmacy of some Hypotensive Drugs," presented by the Society's museum at the annual meeting of the British Medical Association recently (see C. & D., July 14, p. 29). Thanks were expressed to the B.M.A. for the excellent site placed at the Society's disposal for the exhibit, and to several pharmaceutical manufacturers for the supply of materials.

A report was received from Dr. K. R. Capper (editor of the Society's scientific publications) that he had attended on the Society's behalf a meeting on the sterilisation of pharmaceutical products by radiation. The meeting had been called arising out of discussions between the Atomic Energy Research Establishment and glass manufacturers on the use of

that procedure for products in glass containers. As a result of the meeting it had been decided that the Establishment should arrange joint investigations with the Association of British Pharmaceutical Industry on the one hand and the Glass Manufacturers' Federation on the other.

Reports of the examinations held in England and Wales in July 1956 were received. In the Intermediate examination there were 231 first entries, of whom 101 passed, fifty-six were referred and seventy-four failed. Of fifty-five re-entries, ten passed, fifteen were referred, twenty-five failed and five were absent. Forty-eight candidates entered for a referred subject, and twenty-seven passed, twenty being again referred and one being absent. In the Pharmaceutical Chemist Qualifying examination there were 195 first entries, and eighty-three passed; twenty-five were referred in two subjects and forty-five in one subject, thirty-eight failed, and four were absent. Of twenty-seven re-entries one passed, seven were referred in two subjects and one in one subject, fourteen failed and four were absent. Thirty-three candidates entered for one subject and twenty passed, eleven being again referred and two being absent; thirty-four sat for two referred subjects and ten passed, twenty-four being again referred in the two subjects. Of twenty-seven entrants for forensic pharmacy only, twenty passed, six were referred and one was absent.

The Benevolent Fund and War Aid Committee's report showed that grants amounting to £331 had been made to eight widows and two members. Recommendations for grants amounting to £362 to three other widows and one dependant of a member were approved by the Council. Two applications for assistance were deferred, and in another case no grant was made. A special grant of £88 to one beneficiary was approved. The receipt was reported of a legacy of £100 to the Benevolent Fund from the estate of the late Mr. Cecil Bowker, London, S.W.16. THE SECRETARY reported receipt of a cheque for £3 3s. from Miss O. Brooke, Acomb, in memory of the late Mr. Brooke; it would be added to the £35 2s. previously contributed for the purchase of bulbs to plant in the orchard at Birdsgrove House. The warden's report stated that, in the month to July 16, 1956, fifty-nine guests had stayed at the convalescent home for an aggregate of eighty-one weeks, against fifty-six guests and seventy weeks in the same month a year ago. Sixteen contributions, amounting to £71, had been received from guests to supplement weekly payments.

Argentine Convention

An invitation was received from the Argentine Pharmaceutical and Biochemical Association for the Society to be represented at its fourth convention, to be held Octobe. 7–12, 1956 (the Association's centenary year). It was agreed to send a message of congratulation and good wishes, with an expression of regret that it was not possible to send a representative.

It was reported that, in July, fifty-four persons had beer registered as "student," making 135 registrations in the year, against 313 in the corresponding period of 1955 Ninety-one former members of the Society, having paid the required fees and penalties, had been restored to the register, and thirty-five addresses had been restored to the register of premises. A recommendation for the restoration of two former members whose names had been removed more than ten years ago was approved. One application for reciprocal registration under Section XIX (14) of the Society' by-laws, and five applications under Section XIX (16), wer approved. The registrar was authorised to register person who, having submitted the prescribed documents and paid the prescribed fees, applied for reciprocal registration durin August and September 1956.

The Law Committee's report stated that in June 1956, th Society's inspectors and agents visited 1,363 authorise sellers and 475 drug store proprietors and similar trader. Sixteen cases of alleged infringements of the Pharmacy Acwere considered, and appropriate action taken.

The Council decided that the annual meeting of the Society in 1957 should be held on May 15; and that the "August" meeting of the Council should be held on July 30 and 31, 1957.

REGISTRATION AS A "STUDENT"

Explanatory memorandum on new regulations

THE following memorandum has been issued by the Pharmaceutical Society on its new regulations for registration

as a "student":-

For many years past the advantages of taking the Intermediate examination of the Society before the commencement of practical training have been increasingly recognised. In fact the requirement that it should be so taken was introduced in the regulations in 1948 and remained in force for about two years. It was subsequently withdrawn, partly because it was considered that the facilities for advanced work in science subjects in schools were insufficient, and partly because of the deterrent effect it was thought to have on recruitment. In the course of its revision of the Society's educational requirements, the educational policy subcommittee of the Education Committee has re-examined the situation and has reported strongly in favour of reintroducing that step, but in a new form, and the Council has accepted that view. The need for a better prepared student has become more evident with the introduction of the two-year final course, and it is thought desirable that the "sorting-out" process should take place at the outset rather than be spread over the training period.

The way in which it is proposed to bring about the change is to combine the preliminary and intermediate requirements. At the present time, in England and Wales, the preliminary requirements are passes in the General Certificate of Education examination at ordinary level in English, mathematics, a language other than English, and two other subjects. The student is then free to commence his practical training or take his Intermediate examination course as he chooses. The intermediate course and examination consists of chemistry, physics and biology, from which exemption may be obtained by means of the General Certificate of Education in subjects at advanced level. With the new requirements the student must pass in English, mathematics, a language other than English, and two other subjects in the General Certificate of Education examination, two of them at the advanced level, and to pass in chemistry, physics and biology either at the advanced level or in the Society's Entrance examination, which will correspond to the existing Intermediate examination.

Since the two advanced subjects may be two of the three specified science subjects it will be possible for the entrance requirements to be satisfied by the student who passes the G.C.E. examination in English, mathematics and a language other than English at the ordinary level and in chemistry, physics and biology at the advanced level. That represents a reduction from the present requirements of two subjects passed at the ordinary level, so that, after a normal school course up to and including the sixth form, the student will be ready to commence his final course or practical training. For the student who has not studied science subjects to the advanced level or at all in the sixth form, two other subjects at advanced level will be acceptable, but after leaving school he will have to reach the advanced level in the three science subjects, which he can do by private study or attendance at a course held in a technical college; alternatively, he will have to take the Society's Entrance examination.

It will be seen that the requirements will encourage students to stay on at school in the sixth form, but they do not exclude the possibility of leaving school after having reached the ordinary level of the General Certificate of Education in English, mathematics and a language other than English. Subsequently a student who does that must reach the advanced level in chemistry, physics and biology by the same means as the sixth-form student who

has not taken those subjects to the advanced level. The essential difference between the new requirements and the old is that there must be evidence of having passed the G.C.E. in at least two subjects at advanced level, i.e. broadly speaking university entrance, such a result being normally achieved by remaining in the sixth form. In that way students will be more educationally mature and better prepared to proceed with their professional studies.

The possibility of a student not being able to study all three subjects, chemistry, physics and biology, at his school is met by the provision that the Council may allow the course of practical training to commence if two only of the three subjects have been passed. The demand for admission to pharmaceutical degree courses in universities, which is far greater than the places available, has shown the interest in pharmacy which exists among students who can satisfy university entrance standards, but who do not at present take a diploma course as an alternative to a degree course. It is felt that the raising of the entrance standard to university entrance level will have the effect of creating a more favourable attitude in the schools towards pharmacy as a career by raising the status of the diploma course.

The Scottish position is affected by the absence in the examination system in Scotland of an exact equivalent of the General Certificate of Education examination at ordinary and advanced levels. After satisfying the requirements for admission to the Scottish universities the student will need to pass the Society's Entrance examination in chemistry, physics and biology or the General Certificate of Education at advanced level in those subjects.

It should be noted that the regulations must be approved by the Privy Council and are timed to come into force on March 1, 1958.

ECHOES OF THE PAST

CANCER

From The Marrow of Chyrurgery, Warwick, 1647

Is a Tumor unequally painful, hard, livid, and hot, having full veynes in the adjacent parts. In the beginning, being hard to discerne, being no bigger then a Pea, proceeding from Bil. Atra, begotten of yellow choler caused from a hot distemper of the liver, weaknesse of the spleen, stopping of the Hemorod or menstr, or from ill dyet, as by hot things; shewing themselves most commonly at the end of Sumer, and in the harvest quarter.

Prog. None are of easie curation. If they possesse any great cavity, as Matrix and Anus, deale not with them by excision, causticke or burning. If they bee great, and the party weak, incurable: If in the outward parts and superficial, and be not of remarkable bignesse, they may by

incision be cured.

Cure. Dyet cold and moyst, shunne all melancholy meats, as also watching, immoderate grief and labour, as also all other things which thicken the blood, and inflame the humors. Bleed in the full of the moon, for it miraculously stayeth the ebullition of blood, asswageth pain, and hindereth encrease of the Tumor. If it be in the lip, open Cephalic, if in the breast the Basilic of the right arme, if in the right breast. If in the Matrix or Anus, open ven. Poplit. or Saphæna, Purge B pul. Sanct. 3's syr. ros. dam. 3i. seri. Lact. q.s.f. pot. at the first exhibit them twice a weeke, and afterwards a day before, or after every quart, and full of the Moon. The fittest applications outward, are those that repell and digest, as ung. de Ranis viridibus, Catap. made of succ. solani, farin. siligi. & ung. popul. vel coclear & Hederan vel far. lupi, aq. sper. ranar. & fol Herb Ropert. Take a good number of green frogges, whose mouths fill with fresh butter, afterward put them into an earthern pot well glazed, having the bottome full of holes and a cover, place this in the mouth of another set in the earth, lute these well together, and the cover of the upper pot then for the space of three houres, let a gentle fire of charcole bee set about the upper pot; when the pots are cold, take out the frogs of the upper pot, and beat them into fine powder, then mingle the moyster in the lower pot with the powder, and f. unguent, a plate of lead rubbed with merc. viv. excellent.



"OPEN SHOP"

AN UNSCRIPTED COMMENTARY ON THE SPECIAL PROBLEMS OF THE PHARMACIST IN RETAIL PRACTICE

By E. C. TENNER

MMERSED in the practice of pharmacy one tends to shirk the serious thought that is necessary before an opinion can fairly be expressed on the way in which the Pharmaceutical Society should approach its Charter's second object: "To promote pharmaceutical education and the application of pharmaceutical knowledge."

Brief reports of speeches and random discussions on the proposals of the Council's education subcommittee do not place the matter in perspective or make decision easier. It is dangerously easy to be confused and prejudiced about pharmaceutical education and knowledge, and a great deal more could be done to show the whole vital problem to members. The subject is important enough to warrant a delegate conference to itself, and each member should be given a verbatim report of the conference proceedings before final decisions are made by the Council.

A Lasting Impression

The Qualifying examination makes a lasting and deep impression on those who become members of our Society, and on quite a few who do not. Unfortunately the impression is so deep and so lasting that the great majority of us spend the rest of our lives in the biased belief that the particular curriculum each of us pursued and the particular form of examination we survived must be the most likely one to produce really first-class pharmacists like ourselves; and in the belief that the discussion about education policy begins and ends with the examination. Yet it must be recognised that continual changes are needed in the examination and its regulations. Nothing stands still and lives for long. It is less generally recognised that the training and examination of candidates are only instruments-and only some of the instruments—with which the Society carries out its duty under the Pharmacy Acts of maintaining a suitable minimum standard of pharmaceutical skill and knowledge in all authorised sellers of poisons. It must be emphasised that the wider question of promoting pharmaceutical knowledge and education still remains.

It is understandable that that wider problem should not appeal very deeply to many of those authorised sellers of poisons, now compulsorily members of the Pharmaceutical Society but who, given their choice, would not have joined it. They are concerned only with making a living by, inter alia, selling poisons and dispensing EC10's. Having paid their retention fees, they do not have much regard for the way the Society lives up to its Charter so long as their own activities are not hindered. Fortunately for pharmacy there are others who do realise and face up to the significance of the Charter, Too often those responsibly minded men and women may be buried in apathetic branches of the Society, but they still form its stout backbone, and their opinions should be heard and weighed when all the facts have been put before them.

One of the most important steps the Council can take to implement Charter object number two is to give much more information to the membership. The rarefied and often heated atmospheres of the Squares are more likely to be reduced to the healthiest density by admixture with some of the cooler and heavier air one finds in pharmacies.

It is not so long since we were warned, from above, that the statutory rights of members of the Pharmaceutical Society were threatened by the existence of large numbers of "Apothecaries' Hall dispensers." Now it is being breathed about that the Bachelors of Pharmacy who do not become members of the Society may constitute a menace to our privileges and bring about our downfall. The former warning was accompanied by a vigorous, unpopular and unsuccessful attempt to institute some form of registration of unqualified dispensers. The latter "menace" of the unregistered graduates is now discovered at the time the Council is considering revising its educational policy and examination curriculum and when there is a move in some quarters to press for the almost automatic registration of graduates in pharmacy as members of the Pharmaceutical Society.

Now pharmacy is not itself a pure science. It is the application of pure sciences to the purposes of medicine. Biology, chemistry, physics and physiology are harnessed by pharmacy and presented for the uses of medicine. Advances in those sciences must be examined by pharmaceutical research and constantly related to new substances and ideas. That is the province for the graduate in pharmacy, and it is right that the curriculum for a degree should stress research.

Safeguarding the Public

At present it is most fortunate for pharmacy that the pharmaceutical industry can absorb those graduates. The Society must not put any unnecessary difficulties in the way of those graduates who wish, for one reason or another, to join it and take up the privileges reserved for its members. But that having been said, it is necessary to remember that a different and statutory purpose governs persons who set out to become Members of the Pharmaceutical Society and authorised sellers of poisons by taking the Pharmaceutical Chemist Qualifying examination. That examination is designed to protect the public, and in safeguarding that purpose the Society must retain its final power of registration. forensic pharmacy examination, taken after a period of practical experience, is the most useful and effective method by which that can be done, and it must continue to be the gate through which graduates shall be welcomed into membership of the Society. After all, there were until 1933 thousands of practising chemists and druggists and pharmaceutical chemists who did not belong to the Society. It would be futile to be stampeded into relaxing our control of the graduates' gate to membership just because a hundred or two degree men may prefer not to join our Society.

The Society must keep its own examination abreast of modern needs and, in addition to promoting its own research laboratories, must assist the universities to advance knowledge by research. It would be improper and reactionary to attempt to regiment the graduates, but we do not need to surrender the gate to them. But there is much more which the Society must do. What about the third Charter object: "To maintain the honour and safeguard and promote the interests of the members. . . ."? I think achievement of that object is the key to each of the others, and so I make no bones about stating yet again that, if the Society maintains its standards and actively campaigns for public recognition of its members as the proper distributors for all the nation's drugs and nostrums, and if it is not deterred by vested interests, economic or academic, then intelligent graduates will take pains to join it.





An indoor snapshot taken without and with flash.

ARTIFICIAL-LIGHT PHOTOGRAPHY 4. Applications of Flash

THE ability of a small flash-bulb to illuminate a subject at a high level for a fraction of a second enables variable-aperture cameras to be used at small stops for indoor photography. That means good definition and good depth of field. Some idea of the intensity of the flash compared with other forms of artificial light may be seen from the following diagram:—

1		LUMENS	EXPOSURE	LUMEN SECONDS
	CANDLE	12.5	14 mins	10,500
(-,Q;-	100 W BULB	1,200	9 secs	008,01
	No.1 PHOTO FLOOD	B.O O O	l½ secs	12,000
CAM				

Light output of a flashbulb compared with outputs of other light sources.

PF 14 FLASHBULB 500,000 (AV) 1/50 sec

As the intensity of the light source (lumens) increases, the duration of the exposure may be reduced. The photographic effect is therefore rated in lumen seconds, and it will be seen that an effect can be obtained in 1/50 sec, with a PF14 bulb (see C. & D., July 7, p. 14) that would require 1½ seconds with a Photoflood lamp or 9 seconds with an ordinary 100-watt household lamp. It could be said that the PF14 is equivalent to the 75 Photoflood or 450 household lamps.

The "speed" or effective duration of a flash-bulb cannot be given accurately, as it depends on the reflective properties of the moving subject how long its image persists. Conventionally, however, it is taken as the "duration above lalf-peak," which is the period when the light output is at,

or above, 50 per cent. of its maximum. In shutter speed fractions it is, approximately, for the three types of bulb:—

PF1: 1/100 sec. PF14: 1/75 sec. PF25: 1/50 sec.

It will be seen that those speeds are faster than snapshot shutter speeds or the 1/25 sec. used with F and X shutters. Camera and subject movement are therefore arrested to that degree, and even by the open flash method (particularly with the PF1) quite rapid movement is stopped. There is little point, in fact, in using the M setting with the small flash-bulbs until speeds of less than 1/100 sec. are required.

Bounce Flash

In view of its intensity and brevity, flash may be used indirectly by the "bounce" method. The flash-gun is used in the camera position, but is directed upwards or to one side at a light wall or ceiling. The reflected light is still bright



A photograph taken by "bounce flash."

enough for an instantaneous exposure, and, being softer and more diffuse, produces excellent modelling on the subject—a modelling that is particularly pleasing in child studies. As the illumination of the subject is reduced by the "bounce" method, it is advisable to open the lens aperture by one stop or more over that used for the direct method. As the height and nature of reflective surfaces vary, a good recommendation for bounce flash exposure is to use the normal guide number, but divide it by the "bounce distance" (the distance in feet from the flash to the subject via the bounce surface). That will be greater than the direct distance, and will produce a lower product figure. A lower f number means a bigger aperture.

Multiple Flash

What is called multiple flash is used only by the experienced amateur, but the exposure recommendations are fairly simple. If more than one flash-bulb of the same type is used to illuminate the subject at the same distance, the guide number is increased by the square root of the number of flash-bulbs. Thus two flash-bulbs increase the guide number 1.4 times, three flash-bulbs 1.7 times, four flash-bulbs twice, etc. Where additional flash-bulbs are used at greater distances to supplement room lighting they may be ignored, and the exposure based on the main modelling, or nearest flash-bulb. In nearly every form of balanced photographic lighting the supplementary lights will not increase the main illumination by more than 50 per cent, and that can safely be tolerated in the normal latitude of the material.

SYNCHRO-SUNLIGHT

The unique feature of flash is that it can produce, for the duration of an instantaneous exposure, illumination as high or higher than the brightest sunlight. It may, therefore, be used to supplement existing daylight and to balance the big

lighting ranges that sometimes occur. Even snapshot cameras may be used in this way to produce very striking results. Normally snapshots cannot be taken indoors during the hours of daylight as, apart from the under-exposure that results from the much lower illumination indoors, there is a wide lighting range. All that usually records is the window-light.

A flash-bulb, however, produces interior illumination equal to daylight so that, when used in the normal way, the daylight and the interior both record at the same level during the exposure. Not only does this extend the scope of the snapshotter, but the pleasing balance of sunlight and flash produces even better pictures than after-dark flash snaps. With variable aperture cameras the technique may be used to a much greater extent. The lens and shutter should first be set for the exterior light. The aperture number is then divided into the guide number, and the result is the distance in feet at which balanced lighting will be produced by the flashbulb. The shutter speed is, of course, limited by the type of synchronisation.

Synchro-sun Outdoors

The same principle may be applied outdoors to balance the harsh shadows thrown by strong clear sunlight, and with a little experience quite professional results can be obtained by any keen amateur. The flash in these conditions is supplementary, and a good basis for calculation is to increase the guide number by 50 per cent. The normal outdoor aperture is then divided into that figure and the result is the distance in feet at which the flash must be placed (e.g., Guide No. 110. Outdoor exposure 1/25 at f.16. Increase guide No. by 50 per cent. = 160. Distance from flash to subject = 160/16 or 10 feet.

That technique is most useful for outdoor colour photography, where the high contrast of colour film accentuates the heavy shadows. Blue-coated /97 flash-bulbs are used to give equivalent daylight for balance with daylight-type colour material.

A Chartered Accountant gives answers to ANY BUSINESS QUESTIONS?

During the past year, following a long and severe illness, when my husband was unable to follow his occupation, he has assisted me in my business (I am a pharmacist), and drawn a weekly salary subject to P.A.Y.E. We both have life assurance policies (the premiums payable by each of us independently) but as my husband's income was considerably smaller for the last tax year, and he no longer paid tax at the standard rate, I assumed that all the life assurance relief could be given at my rate, that is the full rate of eight shillings and sixpence in the £. The tax office, however, will not permit that, as they contend that only the "wife's basic allowances may be deducted in arriving at her reduced rates." What is your opinion of that point?

It is to be confirmed (regrettably, in the circumstances) that the inspector of taxes is correct in his contention. If a wife has an earned income, she is given allowances in respect of any National Insurance contributions, two-ninths of her net earned income and an additional personal allowance up to £140. Her remaining earned income is taxed at the appropriate rates. Life assurance relief remains one of the allowances claimable by the husband against his income, whether he or his wife pay the premiums; where the husband's income falls below the sum on which full reduced rate relief could be given to him, relief cannot be transferred against the wife's earned income.

I am the lessee of premises, the lease of which terminates in 1957. The present rent is £250 p.a. and I occupy flat above as residence. I have approached landlords as to renewal, and I understand that at the present time they do not propose granting a new lease, but they give no reasons. I have complied fairly favourably within the terms of the present lease as regards looking after

the property according to "all-in" clauses, and see no reason why they should not grant my application. Would you kindly advise me as to my legal standing?

WE assume that your tenancy will expire automatically and without notice to quit in 1957. As you reside above the premises, it would appear that the tenancy would be controlled by the Rent Acts, if the rateable value in 1939 did not exceed £100 (if in London) or £75 (elsewhere). If you are protected by the Rent Acts, your landlord cannot turn you out except on a ground stated in the schedule to the 1933 Rent Act. Usually he cannot turn you out unless he finds you suitable alternative accommodation, or unless he requires possession for himself, in which case the court would consider where the greater hardship would lie. If the tenancy is not controlled by the Rent Acts, you would be protected by Part II of the Landlord and Tenant Act, 1954. Your tenancy would continue automatically until your landlord served you with Notice of Termination. If you are served with such a notice, you would serve your landlord with a counter-notice that you are not willing to give up possession, and you must also within two to four months of your landlord's notice, apply to your local county court for the grant of a new tenancy. That tenancy may be for a maximum period of fourteen years.

INFORMATION WANTED

The Editor would appreciate information about suppliers of the following items:

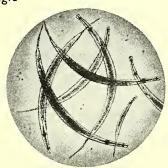
BACETRAN spray pack OPOTHERAPICS (range of products) TETRAC or TRIAC



Children like it ... worms don't

One week's treatment with 'Antepar' Elixir is usually sufficient to eradicate threadworms. A single dose clears roundworms from the gut. Effective without fasting, purging or supporting measures, 'Antepar' acts by paralysing the worms—they are then expelled by normal peristalsis.

'Antepar', the original elixir of piperazine, is well tolerated by patients of all ages. Its pleasant taste is popular with children. Containing piperazine citrate equivalent to 500 mgm. of piperazine in each fluid drachm, 'Antepar' is supplied in bottles of 4 fl. oz. and 20 fl. oz.



'ANTEPAR' ELIXIR



BURROUGHS WELLCOME & CO. (THE WELLCOME FOUNDATION LTD.) LONDON

Associated Houses: AUCKLAND BOMBAY BUENOS AIRES CAIRO CAPE TOWN DUBLIN KARACHI MONTREAL NEW YORK RIO DE JANEIRO SYDNEY



Mepavlon' is the new tranquilliser and muscle relaxant, now manufactured in Great Britain by I.C.I., for use by the medical profession.

The outstanding virtue of 'Mepavlon' is its ability to relieve mental and muscular tension without dulling consciousness: it calms the nervous patient affected with anxiety, restlessness and irritability, it stabilises the emotions, relaxes muscular tension, and in cases of nervous insomnia it induces natural sleep. The drug has no action on the autonomic system and in addition it has a low toxicity; side effects are rare and of a minor character.

'Mepavlon' thus represents an important advance on other tranquillisers and sedatives, and there is now adequate clinical evidence that it can provide a most valuable contribution to the treatment of anxiety neuroses, states of tension, and various neurological and muscular disorders.

Fully active by mouth, 'Mepavlon' is presented in tablets, each 400 mgm. in containers of 30 (a week's full treatment), and a dispensing pack of 250.



QUININE INDUSTRY IN INDIA

More economical production at modernised factory

NEW quinine factory capable of producing about 100,000 lb. of quinine salts annually was opened at the Anamallais, Madras State, recently.

Origins of India's Quinine Industry

The history of cinchona cultivation in India goes back to 1859, when seeds and plants of cinchona were obtained from South America for propagation in the Nilgiris region of Madras and the Khasi Hills of Assam. The species first introduced were C. succirubra, C. officinalis and C. calisaya. C. officinalis thrived well in the Nilgiris. By 1864 the Madras Government's cinchona plantations had over 165,000 plants in about 500 acres, and

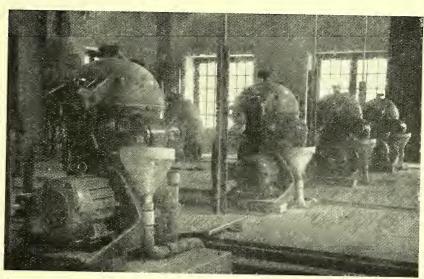
the Bengal Government about 530 plants. In the years that followed, production by private planters of low yielding varieties, and competition from Java brought about a crisis in the industry. Formation of the Kina Bureau in Java in 1913 strengthened the position of that country, which by 1938 had become the premier quinine-producing country in the world. War-time requirements of quinine were among factors responsible for maintaining the plantations and industry in India. The area under cinchona cultivation in the Madras Government plantations in 1955 was 9,638 acres, of which about 7,256 acres were in the Anamallais; the West Bengal plantations covered over 9,200 acres. Research for over a decade resulted in a successful technique of large-scale vegetative propagation of cinchona, and over twenty clones, with as high a content as 17

per cent. of quinine sulphate have been isolated and are today being propagated on a mass scale.

bisulphate, hydrochloride, bihydrochloride, hydrobromide, bihydrobromide and salicylate of quinine, totaquina; and cinchona febrifuge.

Production

The cost of producing quinine at Naduvattam in 1951 stood at about Rs. 42 per lb., at Mungpoo at Rs. 36. Importation of quinine salts during 1952–53 was 73,742 lb. though latterly imports have been partially banned. The figures for the years 1953–54, 1954–55 and for nine months ending December 1955 were 46,289; 9,340 and 7,997 lb. respectively.



Clarifiers in the new quinine factory at Anamallais.

First Alkaloids Factory

The first factory for the manufacture of quinine alkaloids was opened at Naduvattam, Nilgiris, in 1870, and rebuilt in 1920 after a fire. Normal production of the factory was 20,000 lb. of quinine sulphate and 10,000 lb. of other alkaloids annually, though as much as 60,000 lb. of the salt and 30,000 lb. of cinchona was produced and some febrifuge during war years. After the 1939-45 war the Government ordered large-scale plantation, and the construction of a new factory on modern lines at Anamallais. That factory, opened in 1955, came into production at the end of that year. Constructed at a cost of about Rs. 3 millions (£225,000), it has facilities for making annually about 100,000 lb. of quinine sulphate and 30,000 lb. of cinchona febrifuge. For the first three or four years the factory will work on the Government of India's account. The Naduvattam factory which has been working at a loss for several years past because of a low off-take, poor prices and competition from synthetic antimalarials, is continuing to work for the State Government of Madras.

The Madras Government's cinchona used to be coloured pink to distinguish it from material from other sources, but since 1944 the quinine products manufactured by the department have been kept to the British Pharmacopæia standards. In 1950, when British or Indian Pharmacopæia standards became official and compulsory throughout the country, the addition of pink colouring was discontinued. Products manufactured at Naduvattam are the sulphate,

The quantities of different products obtained at the quinine factories at Mungpoo and Naduvattam, and their sale values during 1952-53 (the latest year for which figures are available) were:

Name of Product	Mungpoo		Naduvattam		
Quinine sulphate do. tablets hydrochloride bihydrochloride bisulphate Totaquina powder tablets Cinchona febrifuge	Production (lb.) 48,248 4,295 7,111 1,710 119 4,541 — 18,164	Sales value(Rs) 2,267,656 214,650 376,883 94,050 5,355 124,877 	Production (lb.) 10,420 4,115 940 — 2,205 2,258 8,652	Sales value(Rs) 479,320 156,370 51,700 — 66,150 63,224 190,344	

One rupee = 1s. 6d. approximately.

Drug Inquiry

A pharmaceutical inquiry committee was appointed by the Government of India in 1953 to assess the demand, quality, cost of production and efficiency of the processes used for producing pharmaceuticals and drugs in the country, and to recommend measures to establish the industry on sound lines. Of the quinine industry, the committee stated "the new factory at Anamallais should be made as efficient as possible if production of quinine in this factory has to successfully withstand competition."

Whether that object has been achieved remains to be seen.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, AUGUST 8: With the interruption caused by the Bank Holiday, the week has been quiet in the CRUDE DRUGS market.

A little activity in SENEGA has caused the spot price to harden. BALSAM PERU is still short at origin, and the spot price is firmer. CHERRY BARK is also a little dearer on the spot, and GENTIAN and STYRAX almost unobtainable. Nicaraguan IPECACUANHA is unobtainable on the spot, and shipment prices are harder. Brazilian MENTHOL is in short supply on the spot, with shipment prices obscure. Honey prices are unchanged, but supplies have im-proved recently during the seasonally quiet period.

Home produced Castor oil was cheaper by £5 per ton; and Almond oil by 1s. 6d. to 2s. per lb.

Pharmaceutical Chemicals

Aneurine hydrochloride. — Price per lo is £22 5s. with 10-kilo lots at kilo is £22 Ss. £22 2s. 6d. per kilo.

Ascorbic acid.—Rates (per kilo) are:—1 kilo, £5 7s.; 10 kilos, £5 4s.

CALCIFEROL.—B.P. is 3s, 11d, per gm. for 100-gm, lots and 3s, 9d, per gm, for 250-gm.

CALCIUM PANTOTHENATE.—Price per kilo is £22 17s. 6d.

CARMINE.—Price is from 112s. to 140s. per lb. as to quantity.

CHALK.—Prepared powder, B.P., is £22 per ton for minimum 1-ton lots ex makers'

CHINIOFON.—B.P. 1948 is 67s, per kilo; 50-kilo lots, 62s, 6d, per kilo, The sodium derivative (B.P. 1953) is 99s, 4d, and 92s, 9d, for the same quantities.

CREAM OF TARTAR.—Rates for the home trade are now as follows:—1-ton lots, 231s. per cwt.; 10-cwt., 232s.; 5-9-cwt., 233s.; 2-4-cwt., 234s.; 1-cwt., 235s.

CYANOCOBALAMIN. — Less than 10 gm. lots are £87 10s. per gm.

7-DEHYDROCHOLESTEROL, ACTIVATED. — Price is 4d. per million units for less than 1,000 m.u. and 3½d. for 1,000 to 5,000 m.u.

FOLIC ACID.—B.P. and U.S.P. is offered at 5s. per gm. in 1-kilo lots.

ICHTHAMMOL. — B.P. is from 2s. to 2s. 6d. per lb. in 1-cwt. lots as to origin and container.

LEAD ACETATE.—B.P. crystals are 200s. per cwt., and technical, 180s.

MANDELIC ACID.—In 1-out, lots the price is 12s, per lb, with the Calcium salt also 12s. Sodium mandelate is 12s, 6d, and AMMONIUM MANDALE 50 per cent. solution

Menaphthone. — B.P. is £12 per kilo; ACETOMENAPHTHONE, B.P., £12; WATER-SOL-UBLE (menadione sodium bisulphite, U.S.P.), £16 per kilo.

METHYL SALICYLATE. — In 5-cwt, lots price is 3s, 1½d. per lb.; 1-cwt., 3s, 2d.; 56-lb., 3s, 2½d.

NICOTINAMIDE. — Prices per kilo are now: 1 kilo, 92s. 6d.; 10 kilos, 90s.; 50 kilos, 88s. 6d.

NICOTINIC ACID. — Prices per kilo are 57s, 6d, for 1-kilo and 53s, 3d, for 50-kilo lots.

NIKETHAMIDE. - Prices per kilo are:-1-kilo, 113s.; 50-kilos, 105s.

OLEIC ACID. - Price for B.P. is about 153s. per cwt.

OPIATES.—Home trade rates for 4-oz. up to 7-oz. lots including container (non-returnable) are as follows:—CODEINE. returnable) are as follows:—Codeine.—alkaloid, hydrobromide, iodide, 58s. 6d. per oz. (2,063s. per kilo); hydrochloride, sulphate, 51s. 3d. (1,808s.); phosphate, 44s. 9d. (1,578s.). Diamorphine.—Alkaloid, 60s. 3d. per oz. (2,125s. per kilo); hydrochloride, 54s. 9d. (1,931s.). Ethylmorphine.—Alkaloid, 63s. per oz. (2,222s. per kilo); hydrochloride, 53s. 9d. (1,896s.). Morphine.—Alkaloid, 63s. per oz. (2,222s. per kilo); hydrochloride, 53s. 9d. (1,896s.). Morphine.—Alkaloid, bimeconate, tartrate 60s. 6d. per oz. (2,134s. per kilo); acetate, hydrochloride, sulphate, hydrobromide, 50s. 3d. (1,773s.).—Subject to D.D.A. Regulations.

Papaperins.—Prices to wholesale distribusers.

D.D.A. Regulations.

PARAFFINS.—Prices to wholesale distributors are:— Liquid: Heavy, B.P., £103 2s. 6d. per ton; Light, B.P., £83; Technical White oils, £72 15s. for the LIGHT and £86 5s. for the MEDIUM, all in 40–50 gall. returnable loaned drums, delivered U.K. Soft: White, medium consistency is now £104 7s. 6d. per ton, WHITE, soft consistency, £102 2s. 6d., and YELOW, £82 2s. 6d. all B.P., in non-returnable drums delivered. Hard: Melting point 135/140° F., £88 12s. 6d. per ton.

PETHIDINE HYDROCHLORIDE. — B.P.

PETHIDINE HYDROCHLORIDE. 100-gm, lots are now quoted at 100s. Subject to D.D.A.

PHENAZONE.—Minimum price for quantity is 13s, 10½d, per lb, with usual differentials for smaller lots. 1-cwt. is now 14s. 1½d. per lb.

PHENOL.—Basic price for ice crystals in drums is 1s. 4\frac{1}{2}d. per lb. (under 1-ton lots, 1s. 7\frac{1}{2}d.). Detached crystals, 2d. per lb. above and Liquid, B.P., \frac{1}{2}d. per lb. below the foregoing basic prices.

PHYSOSTIGMINE.—Current rates per oz. are: —Salicylate, 1-oz., 282s.; 4-oz., 276s. Sulphate, 358s. and 352s. Alkaloid, 414s. and 408s., respectively.

Potassium chloride. — In 1-cwt, lots B.P., is 2s. per lb.

POTASSIUM 8-HYDROXYQUINOLINE SUL-PHATE.—I kilo is 47s. 1d. and 50 kilos, 44s., per kilo.

Pyrogallic acid. — 18s, per lb, in 1-cwt, lots. - Pure crystals are

QUINIDINE.—Prices (per oz.) for minimum 100-oz. lots in the home market are: Alkaloid, 8s. 9d.; sulphate, 6s. 7d. Extra charges for small lots.

RESERPINE. — Price is from 50s, per gm, for domestic material.

RIBOFLAVINE. — Price (per kilo) is 24 17s, 6d, for 1-kilo and £24 15s, for 10-kilo lots.

Semicarbazide hydrochloride.—Technical grade is 20s. per lb. for 1-cwt, lots.

Sodium bromate.—1-cwt. lots are quoted at 10s. 9d. per lb.

SODIUM CHLORIDE, - Re-crystallised is 30s. per cwt.

SODIUM SALICYLATE.—Rates are now:—
1-ton lots in bulk, 3s. 7d. per lb.; 5-cwt.,
3s. $7\frac{1}{2}$ d.; 1-cwt., 3s. 8d. Smaller lots at
from 4s. 3d. to 5s. $0\frac{1}{2}$ d. as to quantity

Tartaric acid. — Rates for the home trade are as follows:—10-cwt. lots, 270s. per cwt.; 5-9-cwt., 272s.; 2-4-cwt., 274s.; per cwt.; 5-1-cwt., 275s.

VITAMIN A. — Synthetic. Supplied in strengths of 200,000 international units per gm. the price is 11¼d. per million i.u. Natural is 1s. 4d. per million units.

VITAMIN D. — In oil, 2 million units per gm. the price is 2d. per million international units. Crystalline see under calciferol. D₃ see under 7-dehydrocholesterol activated.

TOCOPHEROL (unesterified) are 1s, 3d, pgm.; 1s, 1d, per gm, and £52 per kilo.

- In 1-cwt. lots the ZINC CARBONATE. price is 1s. $9\frac{1}{2}$ d. per lb.

ZINC CHLORIDE. — B.P.C., cake from 4s. 6d. to 4s. 10d, per lb.; sticks from 5s. 10d, to 6s. 2d, per lb. Technical, 117s. 6d. per cwt.

ZINC OXIDE.—Rates for B.P. quality are: 2-ton lots, £132 per ton; 1-ton, £133; 5-cwt., £136; and under 5-cwt., £139 delivered.

ZINC PEROXIDE. - Price (per lb.) for I-cwt. lots of B.P. is 5s. 3d.

ZINC SULPHATE.—B.P. in 1-cwt. lots is quoted at 1s. 10d. per lb.

Crude Drugs

Aniseed (star).—Chinese is offered at 127s, 6d. per cwt., in bond, and 120s., c.i.f., for shipment.

BALSAMS.—Quotations (per lb.) are:—CANADA: Offers difficult to get from origin; spot, nominally 22s. 6d. COPAIBA, soluble, 8s. to 10s., duty paid. PERU, short at origin; spot, 9s. 9d., duty paid. TOLU (genuine as imported) is 27s. 6d.: B.P. is 17s. 6d., spot.

BELLADONNA. — LEAVES are 2s. 6d. per lb. on the spot and c.i.f. Root, 1s. 10d.

BENZOIN.—Sumatra block on the spot is from £25 to £30 per cwt. No. 1 for shipment is £23 5s., c.i.f. Almonds, 15s. per lb., c.i.f.

BISMUTH METAL. — Minimum rate is 16s. per lb.

BUCHU.—Spot supplies are from 7s. to 7s. 3d. per lb.

CHAMOMILE. — Belgian flowers are 5s. 3d. per lb. on the spot.

CHERRY BARK. - Thin natural is from Is. $7\frac{1}{2}d$. per Ib., duty paid, and rossed 2s., on the spot.

Cinnamon.—Ceylon for shipment (c.i.f. per lb., OOOO, 7s, 5d.; OOO, 7s, 3d., OO, 7s, 1d.; O, 6s, 11d.; firsts, 6s, 1d. quillings, 3s, 8½d.; chips, 10¼d. to 11¼d

CLOVES.—Zanzibar on the spot are nov quoted at 3s. 3d. per lb.; prompt ship ment, 3s. 2¼d., c.i.f. Madagascar, 2s. 8¼d. c.i.f.

COCHINEAL. — Black-brilliant is 27s. pe lb. on the spot; grey-black, 17s. 6d. silver-grey, 16s. 6d.

COCILLANA. Bark is 2s. 6d. per lb. or the spot.

Ergot.—Portuguese is 5s. 10d. per lb c.i.f., for prompt shipment; East European, 4s., c.i.f.

GENTIAN. -Scarce on the spot;

tations for shipment difficult to obtain. GINGER. — African on the spot is 255: per cwt., with August shipment at 230s c.i.f. Jamaican No. 3 for August-Septembt shipment; 515s., c.i.f., spot, No.

GUM ACACIA. -Kordofan cleaned sor on the spot are 132s. 6d. per cwt.; afloa 142s. 6d., c.i.f., and shipment, 129s. c.i.

Henna.—Indian is 70s. per cwt. on the spot. New-crop Bombay green, 62s. bu per cwt., c.i.f., quoted.

HONEY. — Australian light-amber is 145s. and medium-amber, 140s.; Argentine, 145s.; Jamaican, 145s. to 150s., all per cwt., on the spot.

IPECACUANHA. — (Per lb.). Colombian, 43s. 6d., spot, and 41s., c.i.f. Matto Grosso, 43s, 6d., spot, and 42s., c.i.f. Nicaraguan, spot, unobtainable; shipment from 56s. 6d. to 57s. 6d., c.i.f.

KARAYA.—No. 1 gum on the spot is now quoted at 285s. per cwt., and No. 2 at 235s.

KOLA NUTS. — Jamaican are offered at about 8d. per lb., spot, and African, 5½d.

LANOLIN. — In 1-ton lots the price of ANHYDROUS, B.P., is from 160s, to 165s, per cwt.; 5-cwt. lots from 162s, to 167s. per cwt. HYDROUS, B.P., is from 140s, to 142s, for similar quantities. All in drums, carriage paid, U.K.

carriage paid, U.K.

LIQUORICE. — Natural root: Quotations for Anatolian and Russian have been withdrawn; Persian, 37s. 6d. Chinese, 42s. 6d. per cwt. Block juice is 200s. per cwt. for the Anatolian and 185s, for Chinese and British on the spot. Italian stick from 310s. to 476s. per cwt., duty paid.

LOBELIA HERB. — Spot material is 11s. to 11s. 6d. per lb. August-September shipment, 10s. 6d., landed.

Lycopodium. — Supplies of Russian triple-sifted are 7s. 3d. per 1b. in bond.

MACE. — Whole on the spot is 23s, per

MENTHOL. — Chinese, 48s. per lb. in bond (51s., duty paid). August-September shipment, 45s., c.i.f. Brazilian, spot, very short, 43s. 6d. duty paid; shipment prices obscure.

ORANGE PEEL. — West Indian bitter quarters are 11d. to 1s. per lb.; Spanish, 1s. 1d. to 1s. 3d.

PEPPER.—Market firmer. White Sarawak is 2s. 5\frac{1}{2}d. to 2s. 6d. per 1b., on the spot, with August shipment at 2s. 4\frac{1}{2}d. to 2s. 4\frac{3}{4}d., c.i.f. Black Sarawak is offering on the spot at 1s. 11d. per 1b.; August shipment, 1s. 8\frac{1}{2}d. to 1s. 8\frac{1}{2}d., c.i.f. Black Malabar, 270s. per cwt. on the spot; August shipment, 232s. 6d., c.i.f.

PIMENTO. — Spot is 570s. per cwt. with forward at 520s., f.o.b.

PODOPHYLLUM. — Emodi is quoted at 150s. per cwt. ex wharf. Indication for new-crop Peltatum, 475s., landed.

PSYLLIUM. — Indian seeds are quoted at 1s. 1d., per lb., on the spot.

Quassia. — Chips are 42s, 6d. per cwt. on the spot.

QUILLAIA. — Spot offers of bark are about 225s. per cwt. with shipment, 185s., c.i.f.

RAUWOLFIA. — Serpentina is offered from 4s. 3d. to 4s. 9d., landed terms, as to origin. Vomitoria is 2s. 6d., landed.

SAFFRON. — Mancha superior on the spot is nominally 265s, per lb. Forward position dearer.

SARSAPARILLA.—Jamaican native red on the spot is 3s. 4d. per lb., and for shipment, 3s., c.i.f.

SEEDS. — (Per cwt.'). ANISE.—Tunisian, 215s. in bond; Spanish, 250s., duty paid. CARAWAY.—Dutch, 127s. 6d., duty paid. CELERY.—Indian, sellers at 140s. spot. CORIANDER. — Market continues steady. Spot Danubian or Rumanian, 62s. 6d.; splits, 55s.; and Bulgarian smalls, 52s. 6d., all duty paid. CUMIN. — Market unchanged. Spot Cyprian, 130s.; Moroccan, 132s. 6d., duty paid; Iranian, 125s., duty paid. DILL. — Indian offered at 65s. on spot. FENNEL. — Quiet. Indian quoted at 92s, 6d., spot. FENUGREEK. — Spot. Indian, 67s. 6d.; MOTOCCAN, 67s., duty paid. MUSTARD. — English, 67s. 6d. to 80s., according to quality.

SENEGA. — Spot is 18s. per 1b. Shippers asking about 18s., c.i.f.

SENNA.—Tinnevelly LEAVES (per lb.):—Prime bold, Is. 4\frac{1}{2}d.; prime No. 3, 8d.; f.a.q., No. 3, 7\frac{1}{2}d. all on the spot; PoDS, f.a.q., new-crop, 7\frac{1}{2}d., c.i.f. Manufacturing, 6\frac{1}{2}d., spot. Alexandrian manufacturing pods, 10d.; hand-picked from 4s. 6d. to 6s., as to quality. Really good No. 1 pods virtually unobtainable.

SHELLAC. — F.O.T.N., 315s. per cwt.; F.O. No. 1, 342s. 6d.; fine orange, 360s. to 420s.

SLIPPERY ELM. — Grinding quality bark is 2s. 6d. per 1b.

SQUILL.—White is offered on the spot at 57s, to 62s, 6d.

STRAMONIUM. — Indian LEAVES are 70s. per cwt., and European 80s. on the spot.

STROPHANTHUS. — Kombé on the spot is 6s. 9d. per 1b. for the 100 per cent.; Gratus is 12s.

STYRAX. — Spot is not quoted but a parcel afloat is offered at 5s. 8d. per lb., duty paid.

Tonquin BEANS. — Para frosted are 6s. 6d. per lb. on the spot.

Tragacanth.—No. 1 ribbon is £175 to £180 per cwt.; No. 2, £135 to £140.

TURMERIC. — Madras finger on the spot is 90s. per cwt. with August-September shipment quoted at 80s., c.i.f.

Valerian root.—Indian on the spot is 140s. per cwt. Dutch, 182s., c.i.f.

VANILIN.—Rates (per 1b.) are now:—5-cwt. lots, 27s, 6d.; 1-cwt., 27s, 9d.; 56-lb., 28s.; smaller quantities, 28s. 3d.

56-lb., 28s.; smaller quantities, 28s. 3d. WAXES.—BEES'—Dar-es-Salaam, August-September shipment, 615s. nominal, c.i.f., spot. 625s.; Sudanese, 570s., duty paid, shipment, 515s., c.i.f. Candell-Illa.—Shipment, 550s, per cwt. landed; spot is 550s. Carnauba.—Fatty grey, spot, 600s. per cwt.; for shipment, 585s., c.i.f. Prime yellow, spot, 1,180s.; shipment, 1,180s, c.i.f. (per cwt.).

WITCH HAZEL LEAVES. — Spot supplies are 2s. 3d. per lb.; August shipment, 2s. 1d., c.i.f.

Essential and Expressed Oils

Almond.—B.P. imported oil is 10s. 6d. per lb.; British, 14s. 6d.–15s.

AMBER. — Rectified on the spot quoted at from 1s. 6d, per 1b.

Angelica.—Seed, 285s, per lb.

ANISE.—Chinese, 14s. 6d. per 1b., spot; 13s. $7\frac{1}{2}$ d., c.i.f.

BAY. — West Indian is 10s. 6d. per lb. on the spot.

Bergamot. — Spot quotations are now 68s. per lb.

BIRCH TAR.—Rectified is about 14s. per 1b. in 1-cwt. lots.

Bots DE ROSE.—Brazilian is 25s. per lb. on the spot and 23s. 6d., c.i.f.

CARAWAY. — English-distilled is offered at 55s, and imported from 27s, 6d, to 28s, 6d, per lb., duty paid.

CASTOR. — Lower, Minimum 2-ton lots of pharmaceutical quality £141 per ton, naked ex mill, August-September delivery.

CINNAMON. — From quillings, English-distilled is quoted at 30s. per oz. Other B.P. oils available down to 90s. per lb. Ceylon leaf. crude, 14s. 6d.; rectified, 27s. 6d. per lb., spot.

CITRONELLA.—Ceylon, 6s. 9d. per 1b., spot; shipment, 6s., c.i.f., nominal. Formosa spot. 9s. 6d., in bond; August shipment, 7s., c.i.f.

CLOVE.—Madagascar leaf is 9s. 3d. per lb.. duty paid and 8s., c.i.f., for shipment. Rectified 87–88 per cent., 12s.; distilled bud oil. English, from 35s.; imported, 17s. 6d.

COD-LIVER.—B.P. is 11s. 6d. per gall. in charged returnable drums. Veterinary, is from 9s. 6d. per gall.

DILL. — B.P. English-distilled oil is quoted at 60s, per lb. Imported oils are from 35s, per lb.

EUCALYPTUS.—Australian 70 to 75 per cent. eucalyptol on the spot is 5s. 8d. per lb.; 80 to 85 per cent., 6s. 4d. Spanish 70 to 75 per cent. at 5s. 3d., duty paid. Chinese type, 4s. 9d., duty paid.

FENNEL.—Spanish sweet on the spot is quoted from 12s, per lb, with Russian at 18s. 6d.

GARLIC.—English is 55s. per oz.

GERANIUM.—Bourbon is from 92s, 6d. per lb. on the spot and Algerian, 77s. 6d.

GINGER. — English-distilled oil is 205s, per lb. Imported oils are 165s, for Jamaican and 87s. 6d. for Chinese, duty paid.

Grapefruit. — Jamaican is 16s, 6d, per lb.; South African, 12s.

HYDNOCARPUS.—Spot is about 2s, 2d. per lb.

JUNIPER BERRY. — Czechoslovakian oil (B.P.C.), 15s. 6d. per 1b. and Jugo-Slavian, 14s. on the spot. English-distilled is 155s.

LEMON.—Prices of B.P. oil (4 per cent. citral) vary greatly on the spot according to quality and range between 25s, and 40s, per lb. Californian, 28s, 6d. to 36s, 4d., c.i.f., as to quality, subject to licence.

LEMONGRASS. — Spot is 12s. 6d. per lb.; shipment, 8s. 7½d. to 8s. 9d., c.i.f., as to position.

LIME.—Supplies of West Indian distilled are offered from 35s, to 36s, per lb. on the spot,

NUTMEG.—English distilled is nominally 120s. per lb.; imported, 52s. 6d.

OLIVE OIL.—B.P. is offered at 36s. per gall, on the spot.

ORANGE.—Spot quotations of sweet oil include Floridan at 3s. 11d. per lb.; Californian, 5s. 6d.; West Indian, 7s. 6d.; South African, 7s. 6d. For shipment, proprietary brand Californian sweet is 6s. 1½d., c.i.f., and cold-pressed, U.S.P., 9s. 4d., c.i.f. Terpeneless is 200s. per lb., spot, and bitter, 20s. per lb.

ORIGANUM. — Sellers of 75 per cent, phenols at 13s, 6d, per lb.

OTTO OF ROSE.—Bulgarian is 450s. and Turkish, 190s. per oz.

PATCHOULI. — Penang is 38s., duty paid, and 32s., c.i.f.

PEPPERMINT.—Arvensis: Chinese is 31s, per lb, on the spot and 29s., c.i.f. Brazilian, 23s. 9d., spot, and 21s. 9d., c.i.f. Formosan, 14s., c.i.f. Italian "Mitcham"-type oil is 56s. to 60s. spot, as to make. American, 35s. to 39s.

Petitgrain.—Paraguay, spot, 24s. 6d. to 25s. 6d. per lb., as to brand.

ROSEMARY.—Spanish oil on the spot is from 5s. 6d. per lb., duty paid.

RUE.—Spot offers for small lots are now 17s. 6d. per 1b.

SAGE.—Spanish is offered at from 8s. per lb. and Dalmatian, 30s.

SANDALWOOD.—Mysore is 87s, 6d, per lb. on the spot and East Indian, 82s, 6d. SASSAFRAS.—Brazilian is 4s, 3d, per lb. duty paid.

SPEARMINT. — Offers of U.S.P. oil are from 31s, to 31s, 6d, per lb, on the spot.

TANGERINE.—Sicilian is from 38s, to 48s, per 1b., on the spot.

THYME.—Spot is 8s. 6d. per lb. for the .P.C.

UNITED STATES REPORT

NEW YORK, AUGUST 8: Higher per lb. among CRUDE DRUGS was PERU BALSAM at \$1:30 (up 15 cents). SENNA LEAVES are reported firmer, while RUCHU LEAVES have been very steady. Among ESSENTIAL OILS, both East Indian and West Indian NUTMEG prices are reported strong.

TRADE MARKS

APPLICATIONS ADVERTISED REFORE REGISTRATION

From the "Trade Marks Journal," July 18

For hydrazines and compounds of hydrazines, all being chemical products for use in the treatment of water (1) ZEROX, 750,368, by Whiffen & Sons, Ltd.,

Fulham, London,

For condensation products of resins, polymerisation products of resins and of monomers, casein plastics and cellulose plastics (other than cellu-lose nitrate plastics), all in the form of liquids, pastes, powders, emulsions, dispersions, pellets and granulates and for industrial use (1)

KLEESTRON, 750,761, by Kleestron, Ltd., London, S.W.1.

For chemical products used in industry (1) PROFINE, 753,069, by Thomas Hedley & Co., Ltd., Newcastle-on-Tyne.

For chemical substances and preparations for use as industrial preservatives (1)

PANACIDE, 753,624, by The British Drug Houses, Ltd., London, N.1.

For solvents, being chemical products used in

DIOXITOL, OXITOL, 753,113-14, by Oxirane, Ltd., London, W.1.

Fo; mannre for agricultural, horticultural and jorestry purposes (1)

TRAMINURE, 753,489, by Prepared Organics, Ltd., Exeter.

For non-medicated toilet soap, talcum powder and bath salts; and perfumes and cosmetics (not being toilet preparations) (3)

SAVILLE, 740,290, by Saville Perfumery, Ltd., Watford, Herts,

For toilet soaps for sale in Northern Rhodesia (3) COMET, 747,341, by Rhodesian Industries Co. (Private), Ltd., Salisbury, Southern Rhodesia.

For grease and oil removing preparations and detergents, none being for use in industrial and manufacturing processes (3)

BILGEX, B750,625, by Cuprinol, Ltd., London, W.1.

For all goods (3)

KURBIO, 752,837, by Jorgen Ivar Goldschmidt, Copenhagen, Denmark,

For non-medicated toilet preparations (3) BUBBLING VELVET, 752,842, by Henri René Desvaux, London, S.W.1.

For cleaning preparations (3)

P3 HOROLITH, 752,895, by Henkel & Cie, G.m.b.H., Dusseldorf, Germany,

For soaps (3)

SOFSO, 753,443, by Harriwash Quality Products, St. Annes-on-Sea.

For pharmaceutical preparations for the relief of gastric complaints (5)

Device of words MEDA NUMBER 500, B732,018, by V.B. & G. Products, Leicester.

For cough pastilles and cough mixtures (5)
THREE NOUGHTS, B740,609, by Carter &

Sons (Sheffield), Ltd., Sheffield. For pharmaceutical preparations for the treatment

of vaginitis and for medical prophylactic purposes (5) CEPROVAG, 741,026, by Harker Stagg, Ltd.,

London, E.1. For medicated preparations for the treatment of

the eyes, stomach disorders and headaches (5) Device wih word DAIGAKU, 741,798, by Santendo Seiyaku Kabushiki Kaisha, Osaka, Japan.

For pharmaceutical preparations and substances (5)

DONNABARB, ESKADON, 747,159-60, by Smith, Kline & French International Co., Philadelphia, U.S.A. ETSONAL, 751,159, san Co., Newcastle-on-Tyne, SERENIL, 752,944, by Duncan, Flockhart & Co., Ltd., Edinburgh, SILOPAYN, 752,957, by C. L. Bencard, Ltd., London, N.W.10. NEVRAC-TENE, 753,935, by Etablissements Clin-Byla, Paris, France.

For napkin pads and protective coverings there-

for, all being sanitary clothing (5)
INCO-PAD, 749,691, by Robinson & Sons,
Ltd., Chesterfield, Derbys.

For hormones and hormone preparations, all for

pharmaceutical purposes (5)
MERCORTONE, 750,840, by Merck & Co.,
Inc., Rahway, New Jersey, U.S.A.

For all goods (5)

or all goods (5)

HYPACHOL, 751,018, by Ward, Blenkinsop & Co., Ltd., London, W.C.1, HALIPLUS, B752,388, by the Crookes Laboratories, Ltd., London, N.W.10, OXELADIN, 753,713, by The British Drug Houses, Ltd., London, N.I. CAFDIS, CAFFIS, 753,783-84, by Reckitt & Colman, Ltd., Hull, Yorks. CALAGESTE, 753,000, W.W. B. W. CALAGESTE, 753,000, W. W. W. B. 753,820, by William R. Warner & Co., Ltd., London, W.4.

For pharmaceutical preparations and substances for human and veterinary use, sanitary preparations, medical and surgical plasters and bandages (5)

ATUMIN, 751,829, by P. Beiersdorf & Co., A.G., Hamburg, Germany. SYCOPAX. 753,084, by Imperial Chemical (Pharmaceut cals), Ltd., London, S.W.1.

For medicated confectionery containing glucose (5) GLUCOPHYLL, 752,242, by Meggeson & Co., Ltd., London, S.E.16.

For pharmaceutical preparations for use in the treatment of the skin (5)

DERMANED, B752,571, by Medo-Chemicals, Ltd., London, N.1,

Fo: pharmaceutical preparations and substances containing testosterone phenyl propionate for human use and veterinary use (5)

Tes.P.P.-ORGANON, 753,000, by Organon Laboratories, Ltd., London, W.C.2.

For contrast media for cholecystography (5) FELOSHADE, 753,124, by N. V. Dagra, Diemen, Holland,

For pharmaceutical products and preparations (5) NOBEPLAST, 753,198, by Aktiebolaget Bofors, Bofors, Sweden.

For medicinal charcoal (5)

CLOWCOL, 753,487, by Prepared Organics, Ltd., Exeter.

For preparations of orange juice and rose-hip syrup for medicinal purposes (5) OROSA 753,501, by Optrex, Ltd., Greenford,

Middlesex.

For laxatives (5) NYLAXIN, 753,579, by British Chemotheutic Products, Ltd., Bradford, Yorks.

For medicinal preparations (5)

REMIZID, 753,977, by Eli Lilly and Co., Indianapolis, U.S.A.

For pharmaceutical preparations of vitamins (5) CLORUBRA, 754,012, by E. R. Squibb & Sons, Ltd., London, W.1.

For photographic apparatus and instruments (9) EPITYP, 751,732, by Veb Carl Zeiss Jena, Jena. Germany

For flash-bulbs and flash-guns (9)

EVER READY, 751,952, by Every Ready Co. (Great Britain), Ltd., London, N.7.

For plastics in the form of sheets and films prepared for use in the manufacture of photographic sensitised and unsensitised material (17)

CRONAR, 746,754, by E. I. Du Pont de Nemours & Co., Wilmington, U.S.A.

For pants, bibs and feeders, and aprons for

babies (25)
ERICA, B741,471, by Erica Products, Ltd.,
London, N.W.6.

For napkin pads and protective coverings there-

for, all being articles of clothing (25)
INCO-PAD, 749,692, by Robinson & Sons, Ltd., Chesterfield, Derbys.

From the "Trade Marks Journal," July 25

For synthetic resinous plastics in the form of powder, liquids, emulsions, dispersions and pastes for use in mannfactures (1)

VINAPOL, 751,127, by Vinyl Products, Ltd., Carshalton, Surrey.

For scouring preparations in liquid form, and detergents, all for use in treating textile fibres and textile fabrics in the course of manufacture (1)

FIBOWLEX, 752,412, by James Briggs & Sons, Manchester.

For chemical products used in industry, science and photography (1)

Device with words PICTOGRAPH BRAND CHEMICALS, 749,120, by Pictograph, Ltd. New Barnet, Herts.

For cyanides for use in the treatment of metals (1 AERO, 742,629, by American Cyanamid Co. New York, U.S.A. For perfumes (3)

OBADE, 741,481, by Amos Revill, Ltd., Pang bourne, Berks.

For all goods (3)

Device, 753,119, by Borax Consolidated, Ltd. London, S,W.I. For chemical products used in agriculture, horn

culture and forestry; and manures (1) SCIENTEX, 753,630, by British Scientex, Ltd. London, W.C.2,

For shaving soap (3)

Device of words MENNEN FOAM SHAVE 740,678, by the Mennen Co., Morris Township New Jersey, U.S.A.

For non-medicated toilet preparations, cosmen preparations, brilliantine, hair lotions, toilet shan poos, dentifrices, soaps, perfumes, essential oi and toilet articles (3) LECITONE, 751,276, by Coty (England), Ltd

London, W.I.

For cleaning, polishing, scouring and abrasis preparations; soaps; and detergents (not for w in industrial or manufacturing processes) (3) RYKIT, 751,576, by Riley's Chemicals ar Colours, Ltd., Clayton-le-Moors, Lancs.

For eau de Cologne, non-medicated toilet water

perfumes and perfumed soap (3) 4711 EXTASE, 752,997, by R. J. Reuter Cc

Ltd., London, W.1. For hormone preparations for pharmaceutical u

DELTACORTRIL, 744,306, by Chas, Pfizer Co., Inc., New York, U.S.A.

For pharmaceutical preparations for internal u

PALOTOL, 747,586, by Moore Medicinal Pro ducts, Ltd., Aberdeen, Scotland.

For insecticides (5) SWOTT, 750,194, by Strawson Chemical C Ltd., London, E.15.

For pharmaceutical preparations and substant (5)

MYSTAN, 751,085, by E. R. Squibb & Soi Ltd., London, W.1. OBLARIN, 753,584, British Schering, Ltd., London, W.8.

For pharmaceutical ointments for human a veterinary use (5)
ORGASALVE, 751,156, by Organon Labor tories, Ltd., London, W.C.2.

For all goods (5)
MERODIN, 752,285, by Ward, Blenkinsop
Co., Ltd., London, W.C.1. DYDASE, 753,2 by Bayer Products, Ltd., Kingston-on-Tham Surrey, Device, 753,120, by Borax Const dated, Ltd., London, S.W.I, TENSILC 754,335, by Roche Products, Ltd., Welv Garden City, Herts.

For medicated confectionery (5)
Device with word TOFFS, 752,013, by F. Hampshire & Co., Ltd., Derby.

For pharmaceutical preparations and substance and materials prepared for bandaging (5) BOFOTEX, 753,334, by Aktiebolaget Bok Bofors, Sweden.

For pharmaceutical preparations and substan or use in the treatment of ganglions (5) SECERGAN, 754,354, by Astra Aktiebola

Sodertalje, Sweden. For pants and protective covers for diapers,

for wear by babies (25)
DRYPER, 744,535, by International Latex operation, Dover, Delaware, U.S.A.

From the "Trade Marks Journal," August 1

For all goods (1)

or all goods (1) CYCLOPOL, 738,179, by Cyclo Chemicals, L London, W.C.2. KENITE, 753,675, by Ke Corporation, Scarsdale, New York, U.S. BENNOS, 754,363, by Welzone Housel Productions, Treforest, Glam.

PRINT AND PUBLICITY



Medical Propaganda

Manufacturers' leaflets, folders, booklets, etc., directed to doctors but available to pharmacists.

THE BRITISH DRUG HOUSES, LTD., Graham Street, London, N.1: "Scorbital Phenobarbitone Therapy without Depressing Effects" (blotter), "Meplin in Menopausal D.sorders," "B.D.H. Iron Preparations" (4-p. leaflets).

British Schering, Ltd., 229 Kensington High Street, London, W.8: "Oblivon in Anxiety Neurosis." "Albucid in Ocular Therapy" (4-p. booklet, postcard).

GEIGY PHARMACEUTICAL Co., LTD., Rhodes, Middleton, Manchester: "Documenta Rheumato Logica Geigy" (fifth in a ser.es of monographs on a variety of subjects connected with rheumatology, and the first to be distributed in Great Britain), "Taoryl in the Control of Cough," "Steroxin in Furunculosis" (60-p., booklet, 2-p. leaflets).

PHARMACEUTICAL SPECIALITIES (MAY & BAKER), LTD., Dagenham, Essex: "Concise Information on Thalazole," "Rovamycin Oral Antibiotic Therapy" (4-p. folder, 34-p. booklet).

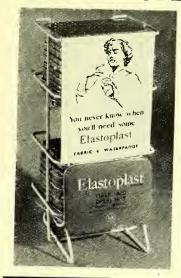
ANDOZ PRODUCTS, LTD., 134 Wigmore Street. London, W.1: "Cafergot Suppositories for Migraine" (dosage card).

Periodicals

YRTON SAUNDERS & Co., LTD., 34 Hanover Street, Liverpool, 1: The Ayrton Link, Summer, 1956, Pp. 24.



PLAY CABINET: Cupal, Ltd., Blackburn, e produced for their Secto insect-killing sol a display cabinet to hold six units.





New Moorland counter display unit supplied by W. B. Cartwright, Rawdon, Leeds, holds seven 80-tablet packs and nine 40-tablet packs.

Booklets and Leaflets

AGFA, LTD., Deer Park Road, Wimbledon Factory Estate, London, S.W.19: "Agfacolor." A pocket-book guide to colour photography. Pp. 16.

HILGER & WATTS, LTD., 98 St. Pancras Way, London, N.W.1: "Resolution and Dispersion with the Hilger Uvispek Spectrophotometer." Pp. 4.

MURPHY CHEMICAL Co., LTD., Wheathampstead, Herts: "The Control of Pests and Diseases of Tomatoes and Cucumbers." Pp. 8,



DISPLAY UNIT: Coleman & Co., Ltd., Westwich Street, Norwich, have produced for Wincarnis jellies the sales and display unit illustrated.



FOR DISPLAY AND SALES: Left, display outer for Birley's antacid powder and tablets (Birley's Antacid, Ltd., Fore Street, Marychurch, Devon); centre: Antil-pilfer display and stock stand for Elastoplast first-aid dressings (T. J. Smith & Nephew, Ltd., Neptune Works, Hull; stand by Displaywork, Ltd., 12 Henrietta Street, London, W.C.2); right, display outers for Astral skin cream (D. & W. Gibbs, Ltd., Isleworth, Middleyex).



Display material for Remington Four-most shaver

Advertising Campaigns

IMPERIAL CHEMICAL (PHARMACEUTICALS), LTD., Fulshaw Hall, Wilmslow, Ches: Savlon liquid antiseptic, In The Times, Daily Mail, Pauch, Good Housekeeping, Housewife, Ideal Home, Wife and Home, Woman's Journal, Family Doctor, during September, October, November.

REMINGTON RAND, LTD., 26 Kensington High Street, London, W.8: Super 60 and Four-most shavers. In national daily, Sunday, and London evening Press, national large circulation popular periodicals and weekly newspapers during September.

Commercial Television

PROGRAMME details are given to enable chemists to put in linking-up displays if they wish. Notice given is as far in advance of the programme date as can be guaranteed by the broadcasting companies.

ALL STATIONS

Correction: Field's French soaps' schedule was completed on July 28, and not as previously indicated.

LONDON STATION

SUNDAY, August 19: Anadin.

WEDNESDAY, August 22: Gibbs' S.R. tooth-paste (between 10 and 10.30 p.m.); Zal disinfectant (between 10 and 10.35 p.m.).

FRIDAY, August 24: Zal disinfectant (between 10 and 10,35 p.m.),

SATURDAY, August 25: Knight's Castile soap; Anadin; Silvikrin.

BIRMINGHAM STATION

WEDNESDAY, August 22: Astral cream (between 8 and 10,30 p.m.); Zal disinfectant (between 10 and 10,35 p.m.).

August 23: Astral cream (between 8 and 10.30 p.m.); Gibbs' S.R. tooth-paste (between 8 and 10 p.m.).

FRIDAY, August 24; Zal disinfectant (between 10 and 10.35 p.m.).

SATURDAY, August 25: Cussons' cold cream soap (at 10.45 p.m.); Silvikrin.

MANCHESTER STATION

SUNDAY, August 19: Zoflora.

WEDNESDAY, August 22: Knight's Castile soap; Astral cream (between 8 and 10,30 p.m.).

THURSDAY, August 23: Zoflora; Astral cream (between 8 and 10.30 p.m.).

SATURDAY, August 25: Cussons' cold cream soap (at 10.45 p.m.); Fennings' cooling powders, mother's book, rheumatic tablets (between 2.45 and 3.30 p.m., and 10.45 and 11 p.m.).

Dailly, August 20-24: Silvikrin.

AGFA, LTD., Deer Park Road, Wimbledon Factory Estate, London, S.W.19: Agfa black and white films. Pp. 6.

R. F. HUNTER, LTD., 51 Gray's 1nn Road, London, W.C.1: Photographic apparatus and accessories, 1956-57. Pp. 56.

Price Lists

GEIGY PHARMACEUTICAL Co., LTD., Rhodes, Middleton, Manchester: Medical products. June. Pp. 50.

KODAK, LTD., Kodak House, Kingsway, London, W.C.2: Trade circular, July, Pp. 8.

SANDOZ PRODUCTS, LTD., 134 Wigmore Street, London, W.1: Supplement (for hospitals and public health departments). Pp. 2.

WILLS

MR. P. CLOUGH, The Knowle, Keighley, Yorks (a former director, Milton Therapeutics, Ltd., and a chairman, Milton Antiseptic, Ltd.), left £84,396 (£83,549 net).

Mr. C. A. Coles, M.P.S., St. Mary's Cottage, Debenham, Suffolk, left £7,107 (£7,015 net).

MR. T. J. Cox, M.P.S., 61 Stoneygate Road, Leicester, left £7,804 (£4,519 net).

Mr. J. Donald, M.P.S., Springbank House, Campbeltown, Argyll, left personal estate in England and Scotland valued at £21,032.

Mr, S. W. M. Hamson, M.P.S., 48 Railway Road, King's Lynn, Norfolk, left £985 (£932

MR, C. W. Higgins, M.P.S., Fairdown, Bouverie Avenue South, Salisbury, Wilts, formerly 47 Market Place, Salisbury, left £22,435 (£21,786 net).

Mr. A. H. James, M.P.S., 18 Milkwood Road, Herne Hill, London, S.E.24, left £14,035 (£13,125 net).

MR. C. JESSOP, M.P.S., 8 North Marine Road, Scarborough, Yorks, left £7,163 (£356 net).

Mr. G. F. Jones, F.P.S., 3 Meadow Head, Woodseats, Sheffield, left £5,030 (£400 net).

Mr. T. KNIGHT, M.P.S., High Street, Crowthorne, Berks, left £23,838 (£23,225 net).

Mr. J. H. LLEWELLIN, M.P.S., 14 Hamilton Milford Haven, Pembs, left £16,965 (£16,854 net).

MISS E. M. B. LORD, M.P.S., 78 Northumberland Road, Old Trafford, Manchester, left £4,921 (£4,791 net).

MR, W. D. McDavid, M.P.S., 85 Earlspark Avenue, Newlands, Glasgow, left personal estate in England and Scotland valued at £14,728.

Mr. W. A. Major, M.P.S., 13 Rayleigh Road, Eastwood, Southend-on-Sea, left £3,066 (£1,469 net).

S. H. Mathews, M.P.S., 6 Maitland Barton Road, Cambridge, left £19,040 (£18 864 net).

Mr. G. Nelmes, M.P.S., Earthcott, Mill Road, Thingwall, Barnston, Ches, left £737 (£693 net).

MR. A. L. PETERS, M.P.S., 160 West Park MR. A. L. PETERS, M.P.S., 100 West Drive (West), coundhay, Leeds, left £15,089 (£15,023 net).

MR. E. PETERS, M.P.S., 16 St. Paul's Road, Weston-super-Mare, who qualified as a chemist and druggist in 1913, left £18,063 (£17,966 net).

Mr. A. Priest, 77 Woodham Lane, New Haw, Weybridge, Surrey, who qualified as a chemis and druggist in 1895, lcft £6,506 (£6,693 net).

Mr. E, RICHARDSON, M.P.S., 3 Brightling Road, Crofton Park, London, S.E.4, left £9,828 (£9,793 net).

Mr. J. E. Robinson, M.P.S., Highbury, Bal-combe Road, Haywards Heath, Sussex, left £15,831 (£15,625 net). Among bequests was £100 to the Benevolent Fund of the Pharmaceutical Society.

Mr. W. T. Robson, M.P.S., 74 Capel Road, East Barnet, Herts, left personal estate in England and Scotland valued at £2,382.

MR. J. J. B. STANLEY, M.P.S., Sherwood Hospital, Nottingham, and formerly of 2 Field Lane, Alvaston, Derby, who qualified as a chemist and druggist in 1911, left £8,501 (£8,469 net).

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion,

Monday, August 13

HULL CHEMISTS' ASSOCIATION and BRANCH, Imperial hotel, Hull, at 1,30 p.m. Luncheon club.

SHEFFIELD PHARMACY CLUB, Trippet Lane, Sheffield, at 7.30 p.m. Treasure hunt.

Wednesday, August 15

BIRMINGHAM PHARMACEUTICAL ASSOCIATION, cricket ground at rear of Saracen's Head hotel, Stratford Road, Shirley, at 2.30 p.m. Sports day. If wet, at Shirley Institute.

C. & D. WEEKLY LIST OF PRICES

A=Advanced; R=Reduced; I.R.P.=Iuclusive Retail Price; *=Tax 30 per cent.; †=Tax 90 per cent. NEW PRODUCTS AND PACKS

MERCK-SHARE &	DUTIME,	LID.	(Irom
August 13)			
Sulfathalidine tablets	100	12	0 R
	500	57	6 R
powder 100	gm.	23	6 R
500	gm.	114	6 R
Sulfasuxidine tablets	100	15	3 R
tuoieto	500	73	9 R
powder 25	gm.	7	9 R
	gm.	30	6 R
500		147	0 R
200	D 444.	14/	O 11

P.A.T.A. LIST

(Alterations notified this week by the Proprietary Articles Trade Association.)

SANITAS CO., LTD.

Sanitas* 2 0 A 3 0 A 14 9 22 0

Toilet water† IMPERIAL CHEMICAL CALS), LTD. Mepavlon tablets 400 mgm (PHARMACEUTI-

DOROTHY GRAY, LTD.

MEDO-CHEMICALS, LTD.
Dioctyl-Medo* 100 mils
500 mils

RANK PRECISION INDUSTRIES, LTD.
G.B.-Bell & Howell Magnetic playback attachment 420

420 0

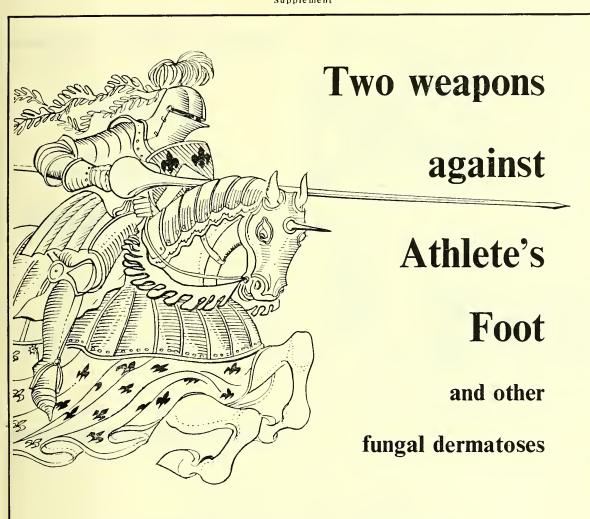
C. & D. RETAIL AND DISPENSING PRICE LIST

The drug index for August was 201

C	ost	Item	4 oz.	1 oz.	1 dr.
d.	per	ICII	s. d.	s. d.	s. d.
20	500 gm.	Calcii hydroxid ,	0 9	0 21	
147	500 gm.	Cera alba in massa	4 9	1 4	0 21
159	500 gm.	Cera alba in placentis	5 3	1 6	0 3
141	500 gm.	Cera flava (in massa) exot	4 6	1 3	0 24
21	500 mils	Liq. ammoniæ dil. P II (9) 2s. 4d. 16 fl. oz.	0 9	$0 2\frac{1}{2}$	
30	500 mils	Liq. calcis chlorinatæ 3s. 4d. 16 fl. oz.	1 0	0 31	_
144	500 mils	Liq. tolut. pro syr. 1 to 7	4 8	1 4	0 21
83	25 gm.	Ol. myristicæ exot	-	-	2 3
54	500 mils	Oxymel	1 10	0 6	0 1
37	25 gm.	Peptonum siccum	-	_	0 11
111	5 gm,	Santoninum	per	gr.	0 31
48	500 mils	Spt. saponis kalini meth,	1 7	0 6	0 1
63	½ gal.	Spt. vini meth. (indust.) pint 2s. 4d.	0 6	0 2	_
66	$\frac{1}{2}$ gal.	Spt. vini meth. (mineralised) pint 2s. 5d.	0 7	0 2	_
236	100 gm.	Sulphadiazin. (Merck-Sharp & Dohme)	per	100 gm.	29 6
1156	500 gm.	S. 1	per	500 gm.	
276	100 gm.	Sulphamerazine (Merck-Sharp &	per	100 gm.	34 6
1356	500 gm.	Dohme) S. 1	per	500 gm.	169 6
209	250 mils	Tinct. chlorof. et morph. co D.D.	_	3 9	0 7
132	500 mils	Tinct. lobeliæ	4 3	1 2	0 2
165	500 mils	Tinct. lobeliæ ætherea	5 4	1 6	0 3
93	500 gm.	Ung. hydrarg. nitratis. dil	3 0	0 10	0 2
84	250 gm.	Ung. iodi	5 5	1 7	0 3
78	25 gm.	Virid, nitens	-	-	1 10
144	500 gm.	Zingib. rhiz. Jam	4 8	1 4	$0 2\frac{1}{2}$
174	500 gm.	Zingib. rhiz. Jam. pulv. opt	5 8	1 8	0 3

Cost		TABLETS		Selling Price (in containers)	
d.	per			500	
580 680 460	500 500 500	Sulphadiazin. (Merck-Sharp & Dohme) S.1 Sulphamerazine (Merck-Sharp & Dohme) S.1 Trisulphonamid (Merck-Sharp & Dohme) N.F.	s. d. 15 0 17 6	s. d. 72 6 85 0 57 6	

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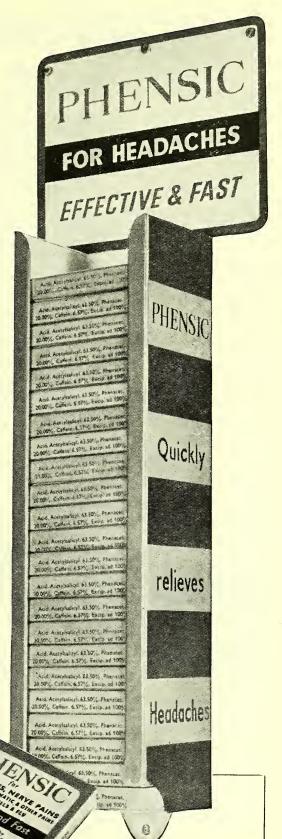
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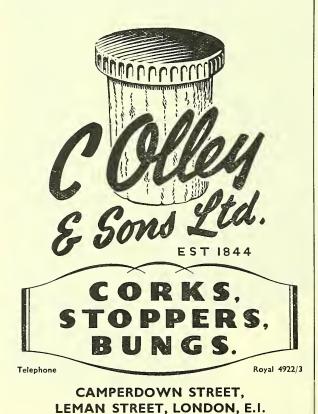
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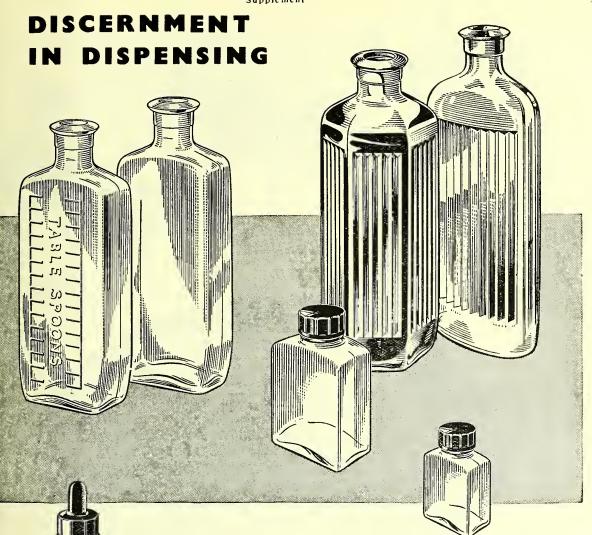
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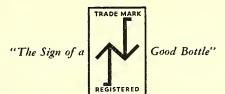
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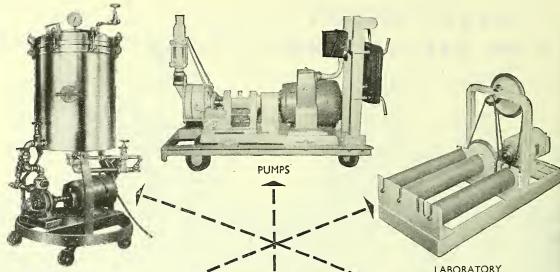
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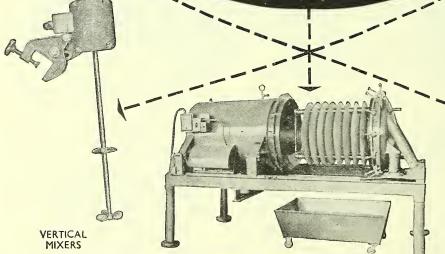
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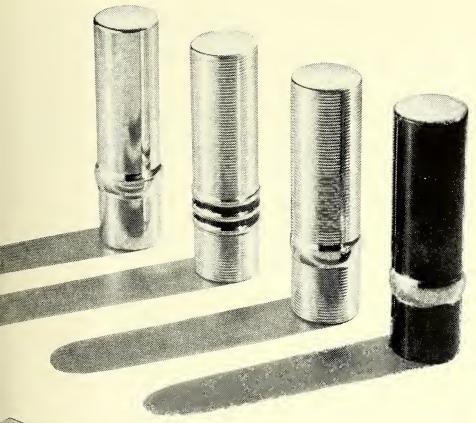
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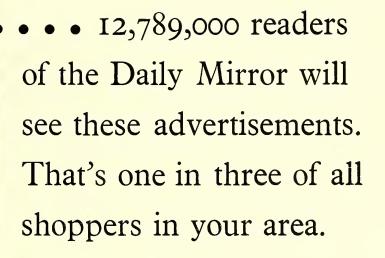
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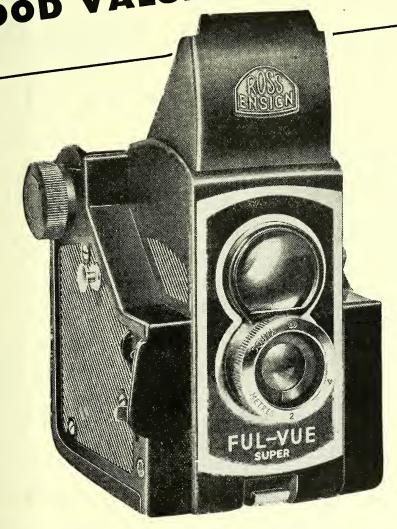
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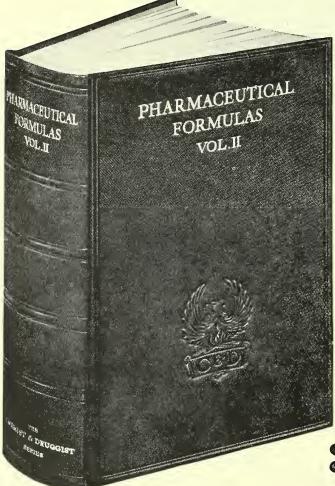
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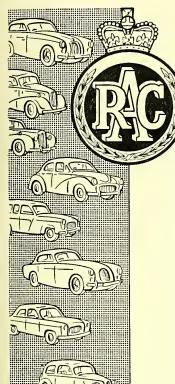


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C 273

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C 5471

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C5535

THE LONDON HOSPITAL, E.1
Senior Pharmacist
Experienced pharmacist required for this post
in Category V Teaching Hospital, Age, qualifications and experience to Secretary, The London Hospital, Whitechapel, E.1. C 272

THE UNITED NEWCASTLE-UPON-TYNE HOSPITALS,

ROYAL VICTORIA INFIRMARY
Pharmacist
required for work at the above hospital, Salary
and conditions of service will be in accordance
with Whitley Council recommendations, Applieations stating age, qualifications, experience, and the names and addresses of two referees to be sent to the House Governor and Secretary, Royal Victoria Infirmary, Neweastle-upon-Tyne, 1.

WHITTINGHAM HOSPITAL,

NEAR PRESTON, LANCS
Senior Pharmacist
(either sex) required, Salary £575 x £30 (5) x £25 (2)—£775, Applications to the Secretary as soon as possible. C 5500

WEST FIFE HOSPITALS BOARD

WEST FIFE HOSPITALS BOARD
OF MANAGEMENT
Chief Pharmacist (Category 3)
Applications are invited from suitably qualified persons for the above post, This is a new appointment and the successful candidate will be required to undertake the planning and development of a pharmaceutical service for the Group of six Hospitals with a total of 597 beds, Salary scale £730-£905 with a special allowance for higher qualifications, N.H.S. Whiteley Council conditions of service; post superannuable; medical examination for new entrants to the Service, Applications giving details of age, qualifications and experience to the Group Secretary and Treasurer, 16 Comely Park, Dunfermline, not later than August 30, 1956.

C 5506 C 5506

SITUATIONS VACANT

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RETAIL (HOME)

ASSISTANT PHARMACY MANAGER
APPLICATIONS are invited for this position in the Central Pharmacy of the
Gillingham Co-operative Chemists, Ltd.
Superannuation seheme with transfer elause.
Domestic accommodation available. The
position is open to male or female applieants, Applications stating age, experience
and salary required to Secretary, Gillingham Co-operative Chemists, Ltd., 142 High
Street, Gillingham, Kent. C 3915

BEDFORD, PHARMACIST WANTED, Lady or gentleman, good-class family type business. Interesting position with private company (3 pharmacies), Superannuation and life insurance scheme. Apply giving full particulars to: Directors, Taylor Brawn & Flood, Ltd., 71 High Street, Bedford.

C 3923
DONCASTER CO-OPERATIVE CHEMISTS, LTD., require the services of pharmacist (male

Street, Bedford. C9-OPERATIVE CHEMISTS, LTD., require the services of pharmacist (male or female) as branch manager, 44-hour week; minimum annual salary £840, bonus increments for sales increases, Rota duties are additional payments, Applications with usual particulars to Superintendent Chemist, Doncaster Co-operative Chemist, Ltd., P.O. Box 20, Doncaster. C263

caster Co-operative Chemists, Ltd., P.O. Box 20, Doneaster. C 263
LADY DISPENSING ASSISTANT for country practice, Northumberland. Certificate desirable but not necessary. Good salary for suitable person with experience, Furnished cottage available. Two referces, Box C 3910.
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MANAGER OR MANAGERESS, locum or permanent, required, would suit newly qualified pharmacist or elderly. Hours 9 to 6 p.m. Halfday Thursday; no Sunday rota duties, Very good supporting assistant, Apply by letter or phone for interview. Salary £15 per week, Leslie Martyn, Ltd., 34 Dalston Lane, London, E.8.

C 3904
MARBLE ARCH, (Near). Pharmacist of proved

Leslie Martyn, Ltd., 34 Dalston Lane, London, E.8. C 3904 MARBLE ARCH, (Ncar), Pharmacist of proved ability required to manage attractive and modern shop with varied dispensing connection. There is an excellent opportunity of a substantial salary and bonus, Good supporting staff and modern equipped dispensary, etc, Permanency with superannuation benefits, Apply with full details stating when available for interview to Box C 3921.

PHARMACIST, male or female, required by widow, as dispensing manager for family business in London, E.7, area, Rota 1 in 8, No Sunday duty, Box C 3919.

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REPRESENTATIVE REQUIRED by old-A REPRESENTATIVE REQUIRED by old-established manufacturing chemists for impor-tant London territory. Progressive position, Immediate appointment, Existing connection of approximately 600 accounts, Preference to man of experience, car owner and resident in London area. Remuneration by salary and expenses. Write: Quoting fullest details in first letter to Box C 5548.

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(c) At present engaged in retail pharmacy or have experience in selling to chemists.

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THE CROOKES LABORATORIES LIMITED

Representative

required, to cover doctors, hospitals and chemists, for the Manchester and East Lancashire area. Candidates should possess personality and initiative and must agree to reside on the territory. A pharmaceutical qualification or adequate technical background is essential. The appointment is well remunerated with progressive salary, adequate expense allowance and annual commission directly associated with territorial results. The position is superannuated, and only candidates with keen desire to progress should apply in writing, with full details regarding age and past experience, to the Sales Director, The Crookes Laboratories Limited, Gorst Road, Park Royal, London, N.W.10.

Situations Vacant—Continued

LEADING MANUFACTURERS of medical and first-aid supplies require representatives to cover industrial and wholesale trade outlets in S.E. England and Midlands areas, Salary, commission, pension scheme, car. Applications giving age, experience, present position and salary, to Box C 5539.

MAY & BAKER, LTD., DAGENHAM, Essex, have a vacancy for a Pharmacist in their Development Laboratory to carry out investigation of problems of manufacture and formulation in pharmaceutical preparation. Candidate should have a B.Pharm, or Ph.C. qualification. Contributory Pension Scheme. Apply initially in writing, quoting reference No. 150, to the Personnel Officer. C 5526

MEDICAL REPRESENTATIVES required by London manufacturing chemists to call on doctors, dentists, hospitals and chemists, Experience of medical detailing an advantage but not essential if applicant has a good pharmaceutical background, Applications invited from pharmacists, 25 to 40 years of age, stating experience and salary required. Box C 264, MEDICAL REPRESENTATIVE required for the London area; age preferably 25-35; personality, enthusiasm and sales ability are prime requirements; pharmaceutical experience an advantage but an interest in medical technicalities and ability to learn quickly are an acceptable alternative; this is a congenial salaried post (with the minimum of paper work) detailing highest quality pharmaceutical trade; a car, replaced annually, is provided; liberal expenses allowed and a non-contributory pension scheme is operated. Applications, in writing, giving fullest details of education and experience, should be addressed to the Sales Manager, Lederle Laboratories Division, Cyanamid Products, Ltd., Bush House, London, W.C.2.

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OLD-ESTABLISHED FIRM of pharmaceutical manufacturers has vacancies for a pharmacist and also a science graduate with experience of pharmaceutical manufacturers has vacancies for a pharmaceutical manufacturers with experience of pharmaceutical manufacturers will assist Chief Chemist in supervision of production, quality controls and development work. Five-day week. Salary range £800.£950 according experience. Write Managing Director, Willows Francis, Ltd., 73 Shacklewell Lane, E.8. C 5538

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PHARMACEUTICAL MANUFACTURERS, PHARMACUITCAL MANUFACTORERS
West London, require young man for their
packaging and export department. Some practical experience together with keenness and
ability to organise personnel essential. Excellent prospects, Box C 5514.

REPRESENTATIVE with established connection required by old-established manufacturers of tablets, galenicals and packed specialities for a territory covering South Walcs, Gloucestershire, Somerset, Worcester, Hereford and Warwickshire, Substantial salary and commission offered, Car provided and full expenses paid, Apply with full particulars of past experience to Box C 5549.

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invite applications for position of chemist in charge of analytical control laboratory. Applicants should not be over 40 years of age and previous experience of similar responsibilities would be an advantage. Commencing salary will be at the rate of £1,000 per annum and annual increments of £50, up to £1,500 per annum, are anticipated for an applicant with capabilities and who is desirous of establishing himself in what is intended to be a permanent position. A contributory pension scheme is in operation and work is five days a week.

Send full details of qualifications and experience to

Send full details of qualifications and experience to the Managing Director, 46 Southwark Street, London, the M.S.E.1. C 5482

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Situations Vacant—Continued

Situations Vacant—Continued

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of detailing medical specialities and of selling
consumer products. Training will be provided
by the manufacturing companies, Benger
Laboratories, Ltd., and Genatosan, Ltd., before
the successful candidate leaves for New Zealand.
Salary is in keeping with an important appointment and the position is progressive and pensionable, Write in confidence, giving details of
qualifications and experience to the Personnel
Officer (DP), Fisons, Ltd., Harvest
House,
Felixstowe, Suffolk.

C 5537

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AGENTS throughout the United Kingdom required by company manufacturing a unique Dog-Candy product and accessory. The company's products are well established in the Pet-Food trade, but offer considerable scope to energetic agents calling on chemists. Write Box C 3912, stating territory covered, number of retail contacts, and time taken to cover area. Exclusive agencies will be considered.

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ENERGETIC MAN, aged 30, good education, excellent references, 10 years' retail dispensing, seeks position as representative with firm of good repute, Preferably Eastern Counties, Car, clean driving licence, Box C 3917, WOULD ANY DRUG HOUSE be interested? Thirty years' experience retail pharmacy, Clean driving licence, To act as representative Southwest England only, Box C 3920.

WANTED

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C 5496.

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C 5533

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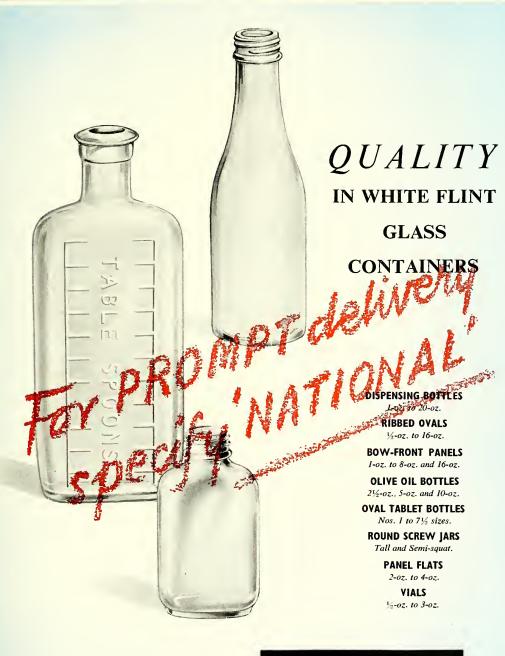
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